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# The relationship between visioning strategy and school effectiveness from a new paradigm perspective.

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**THE RELATIONSHIP BETWEEN VISIONING STRATEGY  
AND SCHOOL EFFECTIVENESS  
FROM A NEW PARADIGM PERSPECTIVE**

**by**

**Glenn W. Rideout**

**A Thesis**

**Submitted to the Faculty of Graduate Studies and Research  
through the Faculty of Education  
in Partial Fulfilment of the Requirements for  
the Degree of Master of Education at the  
University of Windsor**

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2001**

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## ABSTRACT

This correlative study gathered data from 638 Ontario OAC students in 33 Catholic, Private, and Public high schools, and from the principals of those schools, in order to explore the relationship between the input and process factor of visioning strategy and the outcome of school effectiveness. This exploration provided insight into the two major paradigms that serve as a framework for the concept of school effectiveness. The literature revealed the conceptualizations of school effectiveness; the study attempted to measure effectiveness based on students' perceptions of their schools' efficacy in the new paradigm concept. This notion, grounded in the multiple intelligences work of H. Gardner (1985) suggested that schools were most effective when they attempted to bring all students to their full potential. The old, industrial paradigm, on the other hand, propounded a prevailing market orientation, as exemplified in D. Gardner's (1983) A nation at risk: The imperative for educational reform

The data, instrument fabrication, and literature also provided insight into how visioning strategies were constructed and enacted. The study attempted to measure formulation and implementation of this process by gathering data from the principals. The literature and research presented another dichotomy concerning whether the visioning strategy, as conceptualized and constructed, should evolve around the political, economic, and cultural needs of the community, or around the need and right of the individual child to experience full personal development of innate intelligences and personal fulfilment skills, regardless of historical and vested interest pressures exerted by the old industrial paradigm.

The data analysis revealed that there was no correlation between traditional visioning strategy scores and scores measuring student perception of whether they were being educated in a new paradigm effectiveness sense. A statistically significant difference did arise between the two groups of schools as identified by whether or not they were publicly funded, with privately funded schools measuring higher on the effectiveness scale. Further study is needed to identify differences between the visioning strategies of these two groups, and whether this is a significant factor in the achievement of higher effectiveness scores for privately funded schools.

## DEDICATION

This volume is dedicated to my mother, Mildred Rideout, who continues to demonstrate a lifelong pattern of generosity and enthusiasm in her daily decisions. The fruit of these choices, which have centered on the needs of others, has been a tremendous encouragement to those who have encountered her unselfish spirit. Truly, her faith is not without works. Her life continues to be an apt inspiration to look beyond self-interests in the quest for contentment.



## ACKNOWLEDGEMENTS

Although there were times when I doubted my own ability to complete this project to the level that I had initially envisioned it, Dr. Linda McKay, my thesis advisor was always there to provide an appropriate word of encouragement and to express confidence in my ability to shape and complete this project. Her support and faith in me were key in freeing me to bring this to a successful conclusion.

The professional and personal input and assistance of the University of Windsor Faculty of Education graduate ‘team’ of faculty, fellow students, and staff has also been vital in the development of a level of self-confidence that served as a platform from which the work contained herein could be completed. Thanks particularly to Leping Wang, Dr. Doreen Shantz, Dr. Erika Kuendiger, Dr. Benedicta Egbo, Dr. Noel Hurley, Elizabeth Hurley, and Sylvia Alison for their friendship, professional guidance and personal encouragement.

Most of all, I thank my wife Susan, and our sons Adam and Matthew, who listened to, questioned, and believed in the concept and the founding principles of this project, and supported me unwaveringly through to its completion. Together, our faith in God has fostered a life view from which the themes of this work have emerged: we are learning to value the innate and varied intelligences of all whom we encounter.

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## CHAPTER I

### INTRODUCTION

#### A. General Statement of the Problem

The measures of success that emerging generations gravitate to do not necessarily include the structures of the preceding generations. Resulting new structures and measures may be referred to in educational circles as new paradigm effectiveness (Wideen, 1994; Newberry, 1994), requiring skills of the symbolic analyst (Reich, 1991) in an era referred to as the Third Wave (Toffler, 1980).

The educational relevance of the proposed study is tied directly to gaining some appreciation of these change forces and the need they have created for an examination of the relevance of education systems. Curricula and programs can be confined to traditional core subjects, or can be adjusted to center on areas such as human relations, citizenship, environment, family, arts, and consumerism. The challenge is to discover whether school effectiveness can be measured by relevance to the “seven spheres of living” (SIM Consulting Group, p. 36), which are work, civic, global, cultural, relationships, learning, and personal, and by whether it deals with issues relevant to preparation of students for the real world of the 21<sup>st</sup> century.

If the need to evaluate effectiveness paradigms is a result of this change process, then the use of visioning strategy in schools may be the catalyst. Leadership and management styles are often difficult to classify under any specific criteria, but as the

literature in this field demonstrates, the two ends of the continuum may be represented by pull and push styles. Leaders and managers either attempt to involve subordinates in decision making, and lead through shared visions and visions that involve all levels of the organization, or they manage by edict, with no effort to lead (Barnard, 1938; Taylor, 1914). There is often no plan; managers attempting to get an organization to achieve a particular goal or become a certain type of entity frequently seem not to understand that there is a chain of events or sequencing of actions connected to achievement of favourable outcomes. The use of Visioning Strategy can often be the means of pulling the forces within the school organization together in the creation of a shared vision and implementation strategy resulting in the achievement of desired outcomes which reflect the realities and values of the supporting culture in a way that moves beyond the traditional mentality of teaching core subjects to create academic outputs only.

It would appear that when an appropriate variety of stakeholders, including parents and students as well as professional educators enter into a process of surfacing their underlying values and beliefs, recognizing their own personal visions and then sharing those personal visions to create a shared vision that reflects the past, present, and future aims and goals of the education community encompassed by the local school, then the framework for effective education has been laid. This vision, to be true to its roots, must be a reflection of the values of the community, be it defined by one or more of geography, ethnicity, religious conviction, or other life shaping factors. The problem that arises from this, as illustrated in the literature review concerning old paradigm effectiveness, is that the future of our education system is probably being shaped by

educators who are looking into the rear-view mirror at yesterday's system instead of through the windshield at today's reality and tomorrow's opportunities.

#### B. Significance of the Study

An examination of the literature relating to the research question revealed the presence of the two specific elements of visioning strategy and educational effectiveness in what may be a correlative relationship. The five factor model of Edmonds, (as cited in Reynolds, Teddlie, Creemers, Scheerens, & Townsend, 2000) and the process-product research of Brookover and Rutter (as cited in Reynolds, Teddlie, Creemers, Scheerens, & Townsend, 2000) in the late 1970's led some to believe that the identification of certain correlates of old paradigm effectiveness could lead to school improvement through imposition of these factors. Research has subsequently suggested that since schools are loosely coupled organizations, it is not efficacious to impose conditions and characteristics on a school that seem to have contributed to effectiveness elsewhere.

There was, on the other hand, little or no evidence of a meaningful correlation, if not causation, in effective school organizations between following a visioning strategy, which by definition included the culture of the specific school, and achievement of new paradigm outcomes. This study attempted to determine if there was a meaningful relationship between this key input factor and new paradigm effectiveness for the purpose of surfacing issues that the school community believed would foster the development of the whole child to a place of fulfilment in life, a concept to be disassociated from market-based 'child as commodity' thinking.

This basis for school effectiveness, founded on an inclusive visioning strategy, is the catalyst for surfacing and delivering new paradigm outcomes. If empirical evidence supported this link between authentic vision and effectiveness, then the school improvement movement can be encouraged to pursue the input and process factor of visioning strategy as one of the loosely coupled linkages that will allow schools to move toward becoming truly more effective in the 21<sup>st</sup> century.

Another implication of the study is to bring focus to the concept of visioning impacting effectiveness if it reflects congruence between all levels of the supporting culture (Hoy & Miskel, 1997). The design of the MCP-FIV instrument ensures that data is gathered concerning the breadth of the vision formulation and the depth of its implementation. It is therefore possible to distinguish among visioning strategies that do and do not value inclusivity, a broad view of the place of the school in its community, a specific implementation plan, and ability to remain relevant through diverse stakeholder feedback. With the resulting interval level variable scales, it is possible to draw conclusions from an analysis of data concerning whether there is an 'inclusive' visioning strategy impact on the increase of school effectiveness scores. If the hypothesis were demonstrated to be true, then one could reflect upon the relevance of inclusive and co-operative visioning strategy as a correlate of the new paradigm outcomes that identify effectiveness as defined. This could have significant implications for the learning process in the classroom.



### C. Definition of Terms

The following terms are defined for this proposal:

Inclusive Visions: Those visions that are based on values and input from many stakeholders representing many layers of the school organization.

Non-Inclusive Visions: Those visions that reflect the values and input of only senior administrative personnel, often referred to as “top down” or imposed visions.

New Paradigm Outcomes: The impact on students of schools that focus on finding a fit for all, and making the organization serve the individual. Schools that promote learning involving performance of thought and collaborative interactions, with a valuing of multiple intelligences and tools as much as individual knowledge possession are improving effectiveness because they pursue new paradigm outcomes. Specifically, new paradigm outcomes include the attainment of skills of abstraction, systems thinking, experimental enquiry, and collaboration (Reich, 1991).

School Effectiveness: The extent to which a school attains new paradigm outcomes. A school is said to be effective if it attains new paradigm outcomes. An indication of effectiveness is recognition by students of their school’s awareness of and efforts to move students toward attainment of new paradigm outcomes.

Traditional (or Old) Paradigm Outcomes: The teaching of approved curricula and knowledge within specified guidelines, using government authorized texts and standardized tests to confirm that learning has occurred. Focus is on sorting according to worth in the 20<sup>th</sup> century industrial climate, and on making the individual serve the

organization. Routine production skills of simple computations, capacity to take directions, reliability, and loyalty are most highly valued. (Reich, 1991).

Outputs: The immediate products resulting from a school's impact on the input it receives. Cognitive and other achievement that are usually measured at the end of schooling by decontextualized test scores; often advanced as evidence of teacher and school effectiveness.

Outcomes: Things such as employment, earnings, status, attitudinal changes, behavioural changes, that cannot be measured at the output door by school tests, but that are a truer reflection of the success of the school as an influence on the quality of a former student's life.

Personal Vision: A reflection of a person's beliefs and norms and how that relates to one's specific place, tasks and functions in the education system. It combines ideas, opinions, beliefs about instruction, schools and education in general (Creemers. 1997).

Shared Vision: A dynamic measure of the consistency of the beliefs, values, and assumptions between and among the various individuals and levels in an organization, upon which everyday decisions and behaviours of the members and groups are based.

Presence of shared vision will be measured through the visioning strategy instrument

Visioning Strategy: A sequential criteria for creating desired school outcomes. It includes formulation and implementation stages, and is built on in-depth consideration of the past, present, and future of the organization.

## CHAPTER II

### REVIEW OF LITERATURE

#### A. Introduction

In order to explore the hypothesis being tested, this literature review covered four distinct domains of theory and research in illuminating the historical roots, the interactions and impact, and the polemic of each. This was particularly true for the second domain, which impacts the whole sphere of educational effectiveness from all perspectives. While it was not always easy to categorize the literature, the researcher has either put an article in its entirety into its category, or separated prominent themes within an article into the appropriate categories.

These domains are:

1. Visioning Strategy;
2. Paradigms that Frame Education and Schooling;
3. Educational Effectiveness;
4. Visioning Strategy Linked to Educational Effectiveness.

Within each domain the researcher has named thematic sub-strands that occur in the literature of the relevant section.

## 1. Visioning Strategy

### History

Initially, while referred to by other names that reflected its industrial roots, the concept of visioning strategy was heavily laden with top-down directives, spreading conformity from industry to school. The increased pace of industrialism during the nineteenth and early twentieth century was the framework upon which the public schooling system developed. (Stoll & Fink, 1996). Taylor (1914) stressed the importance of management's setting of the overall direction, and ensuring the workers' compliance. Barnard (1936) included as one of the three basic functions of executives the establishment of superordinate goals. As scientific management classicists, Taylor and Barnard would have viewed these goals as directives to the worker, and while creating order in the organization, the worker would not have been required to take ownership of these goals. Their model for goal achievement was the natural systems perspective that measured the output as the only significant issue. Other writers, such as Owens (1987) illustrated the efficiency modelling between industry and school. Early in the twentieth century, schools were "factories in which the raw materials were shaped and fashioned into products to meet the various demands of life" (p. 9).

According to Stoll and Fink (1998) the focus in the 1960's and 1970's on top-down change led to very little lasting impact in schools; it became viewed as management imposed improvements, and the resulting bottom-up approach fared not much better as it did not lead to improvement in student performances. By the 1990's, scholars were suggesting that the best improvement occurred as a result of 'top-down

bottom-up' approaches, where the larger system provided direction and support and the actual change process was left to schools through school based decision making and development planning.

Lieberman (1995) felt that in various incarnations, visioning strategy through the 1980's and beyond continued to be directive, output orientated, and non-inclusive, resulting in the 1980's effectiveness movement in which the principal, as head of school improvement efforts, saw the job as head of the instructional process to simply align the curriculum, and expected teachers to co-operate and support this move.

Leiberman illustrated in two case studies the involvement of many levels of the organization in the formulation and implementation of effective vision . The collaborative aspect of this process allowed for the effective leadership of the 1990's, where the principal collaborated in examining school practices to ensure that the school was doing all it could for all of its student, supporting rather than controlling the education process. Students were now being encouraged to deal with real-world problems, to think conceptually in integrated ways, to work co-operatively, and to use broad-based means of assessing their skills and knowledge.

The resulting written visions centered around multi-age groups and team-teaching as means of expanding the view of student learning and teacher participation. Through bottom-up participation, teachers built commitment, supported the vision, acted on the vision, and invented ways of making it a reality. This was facilitated by bringing teachers to meetings, encouraging many and varied conversations, providing structures for discussion and action, holding retreats, procuring grants, creation of teams and team leaders, and the linking of student success with teacher participation. The involvement of

those impacted as well as the reformers kept the process relevant, and balanced against the competing issues of power and control, versus trust, support, and commitment.

(Lieberman, 1995)

Specific outcomes of the visioning strategy in these two cases centered on creating student choice in how they were to learn, acceptance of varied instructional strategies to accommodate multiple intelligences through the creation of multi-age groups and learning connections, longer time blocks, cooperative learning, and innovative use of computers.

### Foundations

By definition, the word strategy implied some sort of plan, and when contextualized with vision, it took on a connotation of change. Bechtol and Sorenson (1993) laid the groundwork for applying these steps and stages of change to schools by pointing out four characteristics that confirm the importance of the personal development programs and personal visions. There must be commitment to the school mission, knowledge by staff of effective education practices, use of team skills, and the establishment of a 'learning community concept' in the school, all of which blended the values of individuals into the receptive atmosphere necessary for the visioning process to be effective.

Newberry (1994) dealt with the rituals that can alleviate some of the stresses that naturally occurred within organizations that were inhabited by people with critically important emotional needs. In creating effective organizations, leaders must pay attention to people, encourage easy staff communications, practise creative problem solving, keep

the focus on the client, and seek improvement in personal and organizational achievement.

Successful visioning strategy was facilitated through effective leadership (Thompson, 1992). Thompson created a visionary Leadership Strategy that examined the states of mind, values, and orientation to life of people who exhibited visionary leadership. Its eight dimensions were: (a) learning orientation, a strong desire for self improvement and personal development of others, (b) self-knowledge, a strong knowledge of one's weaknesses and strengths, (c) values foundation, a firm anchoring in humanistic values and strong personal integrity, (d) vision, an ability to see beyond "what is" to "what could be" - a strong sense of purpose, (e) values building, a commitment to set an inclusive foundation of humanistic values in the organization, (f) vision bridging, a commitment to unite the organization under a shared vision of the future, (g) empowerment, a belief in people and their abilities - a commitment to draw out the best in others, and, (h) organizational sensitivity, an understanding of human behaviour and how to influence others - diplomacy. Visionary leadership qualities allowed managers to decide if they were leaders, then allowed those that were to move on to the process of actually creating vision in the organization.

Hand in hand with enacting a visioning strategy, the leader needed to be aware of the impact of the change on the people and the organization (Newberry, 1994). The leader required (a) the lens to view the effectiveness of the work unit, (b) awareness of symptoms of change, bearing in mind the psychological and sociological phenomena that the change's impact would bring to bear on the people of the organization, (c) filters of analysis that ensured the link of the work with the overall vision of the organization, so

that everyone was aware of what and for whom the work was being done, and (d) plans for effectiveness that would avoid the symptoms of change that hurt the person and the organization, those of confusion, disorder, and unpredictability.

Ballantine (1997) set out further conditions for successful visioning strategy. With an open system in place, the degree to which visioning strategy as major change could be expected to succeed depended on the extent to which these conditions were present during implementation: clarity of goals and plans, capabilities of administrators and staff, availability of resources, compatibility of the organizational structure with the proposed changes, and willingness of those involved to expend time and effort.

Ballantine presented two key principles of change that demonstrated its impact on an organization. Change at one level or part of the organization would affect other levels and parts, and change was more likely to be successful if key participants were involved in the process of planning and implementing change. The threatening, conflict producing force of significant change increased the stress at all levels of the organization. The open systems approach accepted the inevitability of change, and helped in the analysis of the type, speed, location, and effects of change on the total system.

### Process

Sheetz and Benson (1994) focused on the crucial visioning process as a tool for improving effectiveness in educational institutions, by providing insight into the actual operation of an educational institution. The process started by asking a series of three questions that would lead an individual to a clearer personal vision through the examination of personal beliefs and mental models.



1. “What do we want the organization to accomplish? For students? For Staff? For community?
2. What will the results look like? From the point of view of staff? From the point of view of students? From the point of view of community?
3. How different was my view of success from others? From students? From those I work with? From community?” (p. 48)

Many stakeholders, such as parents, students, educators, communities and department of education officials all could have strong views about what the system should produce. These views may or may not be congruent inside each group, and among all the groups. Personal visions of members of the organization could be examined and clarified to build a shared vision of the organization, which in turn can be broken down to specific desired results of the school organization. Several suggestions for this included:

1. Provide potluck meetings during which participants (users of the vision, usually staff) would share concerning the daily topic or part of the vision being focused on at that time. Ways to share included wall charts for comments, sharing quotes or cartoons.
2. Share at the meeting or through a memo an experience you had in enacting a part of the shared vision. Encourage all staff members to do the same.
3. Seek feedback from visitors to your school who have experienced some aspect of the shared vision. Make a big deal of consistency with the desired outcomes.
4. Have the staff role-play to an “alien” visitor the shared vision of the school. Then ask for feedback from the visitor to see how precisely the staff was able to articulate the vision.

These authors provided a step-by-step guide through the process of building from an individual to a shared vision and then on to articulating the specific goals of the organization. They found that this process was best started by an examination of personal beliefs, through questioning such things as what the organization needed to achieve for various stakeholders, what the results looked like, and how views of success differed among stakeholders.

Sheetz and Benson continued by pointing out that words would have no impact on the direction and output of the school if there was no action taken to connect these words and ideas to actions that occurred on a regular basis in the daily routine of the school. The shared vision must be clarified, or turned into user friendly format. The movement in clarifying a vision was from the clear focus that resulted from the visioning process to the specificity of achieving desired results. When the vision was clarified, rather than having the whole staff attempt to implement each aspect, job-alike groups identified the team goals and group results they wanted to achieve.

A more concise visioning strategy was detailed by Dlugosh, Norton, Sybouts, and Webb (1996). These authors also focused on the school system's past, its historical foundations, beliefs, values, and traditions. A significant amount of time was devoted to each of these phases:

1. The Past - School members/ key leaders under the superintendent's leadership, considered/analyzed the question, "What has the system been in the past?"
2. The Present - The key question, "What are we now?" was considered/analyzed in depth.

3. The Future - An in-depth exploration and visioning of what the system wanted to become in the years ahead were considered/analyzed.
4. System Strengths/Needs, Resources and Actions Needed to Accomplish the vision - Strengths were assessed and weaknesses identified in relation to successful accomplishment of the future vision. What problems/inhibitors must be overcome?
5. Selected/Preferred Alternatives - Action was focused on best alternatives. Specific strategic planning was operationalized (p. 81).

These researchers pointed out that establishing a shared vision was a continuous, dynamic process, not a product. The cultural change that must occur to produce the desired outcomes must rest, at least in part, on personal development programs and personal visions of the future held by members (Dlugosh et al., 1996).

The inputs, outputs and functions of a system define its purpose more accurately than its stated goals and vision, and the intent of its leaders (Katz & Kahn, 1966).

Effective visioning strategy involved examining the results as well as the process.

Lieberman (1995) provided an eight step process for examining the impact of a school's vision on restructuring to create effective student outcomes. A close adherence to this list gave evaluative insight to the processes clarified above.

#### I. Introduction and background.

What is the larger context of the school?

What are the state policies that enabled or inhibited change?

Describe the local context.

Is the school embedded in a larger network of coalition? Describe the schools connection to it.

II. The context and description of the school.

How would you describe the school, its students, neighbourhood, faculty, parent body, and so on?

III. What is the school trying to do?

What is the school's vision ? What are its values?

What was or continues to be the focus of work at the school?

What characterizes the school as special, innovative, and/or visionary?

IV. How has the school gone about making change?

What structures, new roles, responsibilities, ways of working changed? How?

How would you describe the way the school has gone about changing?

What roles, responsibilities, groups, or committees have been formed to re-think what the school is doing and how those at the school can achieve their vision ?

V. What programmatic changes or teaching/learning strategies have been made?

What teaching strategies are being used? Changed curricular ideas? Instructional innovations/ Student-orientated formats? New approaches to curriculum?

VI. What have been the barriers and/ or tensions that have impeded progress?

What has facilitated the changes?

VII. What kind of personal and organizational learning has taken place?

VIII. What is your analysis of this school?

What are the lessons to be learned about policy, practice, technical assistance, teacher learning, development, change, and so on?

Howard (1986) reported on the work of a cluster of educational leaders who defined the characteristics of a school that would serve the needs of students during the twenty-first century. This process began with the study of emerging characteristics of the society which the school serves. This was distinctly different from the traditional process of doing a needs assessment of the school in its present circumstances. The key questions asked were:

- A. What are the characteristics of our society and our economy today and how are these characteristics changing?
- B. What competencies will our children and youth need on order to be successful, happy, contributing members of the emerging society?
- C. What should schools be like in order to nurture these competencies? (Howard, 1986, p. 16)

The researchers in this group felt that from eight to twelve characteristics of an effective school would eventually emerge from the process entailed in answering these questions. Because it would not be feasible to prioritize this many items into a change process, a maximum of three items should be chosen for immediate implementation.

## 2. Paradigms that Frame Education and Schooling

In order to grasp in its fullest form the catalyst of visioning strategy and the dynamic of educational effectiveness that it yielded in varied incarnations, an understanding of the paradigms upon which these embodiments of effectiveness rests was essential. The purpose and form of the visioning strategy, as well as the measures of effectiveness, and reports of its success all hinge on the particular set of expectations and values of those affected. One must, in the end, question whether the intent of effectiveness strategies was to provide outputs to meet the needs of the system, or to provide outcomes that recognize the needs and potentials of the individual.

### Old Paradigm Thinking

Gardner, Larsen, Baker, Campbell et al. (1983), in “A Nation at Risk”, the traditional effectiveness defining work commissioned by the U. S. Department of Education, provided a prominent example of clinging to a paradigm built on the framework of yesterday, on an imposed schooling agenda, and on the exclusion of the valuing of individuals with diverse intelligences (Toffler, 1980; Gardner, 2000).

Gardner’s report clearly favoured the market goal preference which he claimed reflected the mindset of the supporting culture. The report specified, for instance:

1. 75% of Americans wanted students who may attend college to take four years of Math, English, History (U. S. Government), and Science in high school (p. 17).
2. There was a “curricular smorgasbord” (p. 18), with too much choice. The core subjects were the essence of education.

3. “Grades should be indicators of academic achievement so they could be relied on as evidence of a student’s readiness for further study (p. 27).”

Whitaker (1993) focused clearly on the difficulties encountered by those facing vested interests. The old paradigm survived in association with a framework of specific beliefs and ideas, and the reinventing and reordering of these symptoms into a new paradigm was very challenging to those captured by the possibilities of effectiveness in schools of the future, built on inclusive paradigms of empowerment, release, collaboration, shared responsibility, flexibility, and leadership.

Mechlenberger’s (1992) reviewed the New American School Development Corporation’s (NASDC) “twenty-first century” schools competition, and found that of eleven winning projects in this competition, there were few that highlighted twenty-first century ideas. This project was entered into with extreme enthusiasm, encouraged by the ‘education president’ Bush. It was anticipated that \$200 million would be received from private industry to fund this “you ain’t seen nothin’ yet” competition and subsequent 5 year funding of 20-30 radical approaches to education in America. From thousands of proposals, the winners would “break the mold” with “twenty-first century” ideas. Only \$55 million materialized, and congress rejected the request of Bush to extend these ideas to 535 schools who could replicate these ideas across the country. Stoll and Fink (1998) felt that an analysis of this competition provided support for the contention that many school improvement strategies were initiated by governments interested in the support of the powerful corporations and groups that underwrote their elections.

Table A compares the prominent features of the NASDC winners with the qualities of a sample non-winning proposal. These results raised several interesting

questions about the criteria utilized in selecting the winners. The characteristics of the winners could be characterized as closer to the old paradigm while the non-winners seemed closer to the new.

Table A30

NASDC School Characteristics

NASDC SCHOOL CHARACTERISTICS	
RECEIVED FUNDING	DID NOT RECEIVE FUNDING
<p>The 11 winners, who were to receive funding from NASDC, focused on the following characteristics:</p> <ul style="list-style-type: none"> <li>• school readiness</li> <li>• changing relationships between school and community</li> <li>• increased use of technology</li> <li>• altered schedules and calendars</li> <li>• site-based management</li> <li>• alternate performance assessments</li> <li>• teachers as guides and coaches</li> <li>• curriculum integration</li> </ul>	<p>Of 14 non-award winning projects reviewed by Mechlenberger (1992), a typical example was the Community Learning Centers of Minnesota, which proposed a project that included</p> <ul style="list-style-type: none"> <li>• competency-based education</li> <li>• learning meaningfulness to students</li> <li>• interdisciplinary curriculum</li> <li>• community service learning activities</li> <li>• active and experiential learning</li> <li>• projects and cooperative learning to stimulate multiple intelligences</li> <li>• assessment centering around quantitative and performance measures</li> <li>• true professional teachers, who design curricula, arrange professional development</li> <li>• site council will be management, not curriculum, group</li> </ul>
Mechlenberger's 1992 summary of NASDC competition	



Berends, Heilbrunn, McKelvey, and Sullivan (1999), writing for the New American Schools project, stated that the goal of the NASDC project was to create schools that would serve societal needs and in which the process could be evaluated based on standardized testing. The intent was to accept the old paradigm and find a better way to achieve the defined and desired outputs, based on a call from “A Nation at Risk”, (Gardner et al., 1983) to get back to competing in the industrial paradigm.

Mortimore (1992) examined school effectiveness in the traditional conception of academic outputs, in the context of United Kingdom teacher training implementation, and investigated what knowledge and skills were needed by teachers to enhance classroom effectiveness. It was found that the successful teacher needed to function in a number of different types of knowledge, including curriculum, pedagogical, psychological, process (of school and classroom), and sociological. The skills of the successful teacher included the ability to organize, analyze, synthesize, present, assess, manage, and evaluate.

Use of these skills and knowledge appropriately could create the following key factors associated with school effectiveness as shaped by the industrial paradigm:

- **Structured sessions:** Finding the correct balance between self-direction and direct instruction in a well defined framework.
- **Intellectually challenging teaching:** Sensitivity was the key in providing appropriate and diversified challenges to all students.
- **Work centered environment:** An orderly environment where students were working and happy.

- **Limited focus:** Keeping a limit to the number of intellectual challenges being posed to the individuals and groups in a class so that the teacher could continue to be a teacher and not just a manager of classroom dynamics.
- **Maximum communication:** Being prepared to lead with a full repertoire of individual, group, and class communication techniques.
- **Record keeping:** Detailing for each student for effective monitoring.
- **Parental involvement:** Encouraging parents to participate in the daily curricular and extra-curricular activity.
- **Expectations:** Lifting and sustaining by teachers of expectations above race, class or sex prejudices.
- **Use of praise:** Usually more was better.

Mortimore concluded by stating that there was some difficulty in getting U. K. ministerial officials to pay attention to the body of research that supported the theories of school effectiveness and improvements.

Parallel with social order and an economy driven by manager and worker classes, schools enshrined this system by sorting people into their proper places based on an acceptance of the belief that ability to achieve academically was the superior intelligence (Purkey & Novak, 1984). Purkey and Novak referred to the children of this system as “labeled, libeled, sorted, and grouped” (p. 11).

Fink (1995) focused on the dilemma of moving from a highly successful industrial or modern age educational paradigm to a profoundly different concept of education that was appropriate for the post modern era. It was only in this context that

curriculum renewal could be meaningful or relevant to the realities of the twenty-first century.

Legislated changes to education have generally centered around uniformity of curriculum, standardized testing, school based decision making, and decentralized governance. While there was some criticism warranted of the Ontario change process of the 1990's, there was considerably less consultation and responsiveness in other jurisdictions. The challenge for educators was to find ways to recognize and value the basic humanity of all students in the midst of potentially dehumanizing principles and practices. The real challenge at the beginning of the twenty-first century, according to Fink, was to stop focusing on what goods the national economy produced, and to add to the potential value of what citizens could add to the global economy through improving their means of linking their skills and capacities to the world markets. This recognition of the need to value individuals in the post-capitalist world elevated educational policy making to an urgent issue in the political and economic system. The purposes of education needed to be examined; it was not to prepare students to adapt to the technological revolution as pawns of the corporate elite, a very anti-democratic and anti-individual stance, since the free market and democracy were not necessarily synonymous. The focus on educating students for a truly democratic society prompted questions about the interests and capacities of students apart from those recognized by the market dictated forces.

Fink (1995) posited that schools were being called upon to replace or supplement traditional family roles of support in facing real life issues of drugs, pregnancy, crime, homelessness, and intolerance. Bearing in mind the true needs of a democratic society,

and the weight of parenting roles shifted to institutions, it was unacceptable to limit the purposes of public education to those that suit the technocratic needs of the political and economic elite. A quality education system valued and enabled all students to become successful in the postmodern age - hence the emergence of the new paradigm.

To value this new paradigm, it should be contrasted to the traditional learning paradigm, outlined by Reich in The Work of Nations (1991). Reich showed that it mirrored the national economy, with assembly line curriculum, subject divisions, teaching units of time, sequenced in grades, controlled by standardized tests that weeded out defects and then returned for reworking. This paradigm came to mean the imparting of approved knowledge through government guidelines, state-authorized textbooks, standardized tests and sorting of students by ability into homogeneous groups. It de-professionalized teachers, who viewed students as the raw material to be processed for output testing. Proof of teacher and school effectiveness was a good showing in upholding this process. Staff development was unimportant, and in-service was reduced to 'how-to' days for learning 'the way' to do it, and supervision was enforcement of the approved method, ensuring compliance with external requirements.

### New Paradigm Thinking

Gardner's (1985) work revealed multiple intelligences of logical mathematical, linguistic, musical, spatial, kinesthetic, and inter- and intra-personal intelligences, and furnished the basis for the new paradigm where the challenge was to develop, rather than segregate and classify, all these minds. Learning was not sequential and intelligence and ability were not fixed. Recognition of the need to develop and value the varying intelligences of humans was compatible with changing employability needs. Democratic

society was ethically charged with the responsibility of seeing all people as able, valuable and responsible, and of valuing cooperation and collaboration. Recognizing these intelligences would facilitate Reich's (1991) contention that those succeeding in the 21<sup>st</sup> century would possess the following four sets of basic skills:

- Abstraction - the ability to discover patterns of meaning
- Collaboration - the social skills to work with others cooperatively
- Experimentation - the ability to find one's own way through continuous learning
- Systems Thinking - the capacity to see relationships among phenomena.

The new factory and workplace was already focused on the use of these skills.

The direction of reform in education should mirror the direction of reform in the workplace, to include skills of critical thinking, problem solving, and technological literacy, and personal-management skills of positive attitude, responsibility and adaptability, and teamwork skills of contributing to organizational goals, and working within a broad span of control, according to the Conference Board of Canada (1992).

Fink (1995) was concerned that schools address the cognitive imperatives necessary for students to function in the postmodern world, and that they also clearly focus on the individual, and identify characteristics of each student's humanity. The following twelve characteristics surfaced from a survey of educators in eleven countries concerning the implication of this new paradigm for curriculum:

1. Curriculum must lead to learning outcomes, less subject based, more holistic;
2. Learning defined by outcomes, not classroom time;
3. Outcomes must be relevant in context;
4. Assessment of real-life tasks, integrated into instruction;

5. Grouping beyond presumed ability and disability;
6. Technology must be integrated;
7. Greater organizational flexibility;
8. Professional teachers encouraged by leaders who were creating a learning community;
9. Professional growth;
10. 'Top-down bottom-up' approach;
11. Policy development influenced by local school community;
12. School based responsibility and accountability.

Fink concluded that the common core curriculum must reflect the new learning paradigm of emphasis on quality and equity. The humanity of each student must be recognized and nurtured, as a reflection of the democratic notion of education for the benefit of the child, not the political or economic elite.

Toffler, in Third Wave (1980) laid a foundation for understanding the major sweeping sociological eras of world history by relating the conditions which fostered and identified the first wave (agricultural), the second wave (industrial), and the current third wave (synthesis). In so doing, the author clarified several key identifiers that illustrated the shifting patterns, values, and mindsets of the civilizations of each era, and that were reflected in the institutions, including schools, of each era.

In the move away from the agricultural wave and into the second wave industrial paradigm, the foundation of the schooling system was laid. This shift in global patterns was characterized by standardization, specialization, synchronization, concentration, maximization, and centralization, as the result of the cleavage between the producer and the consumer and the ever-expanding role of the market. Bureaucracy was one of the by-

products of this shift, as exemplified in schools as well as in industrialized society. The transfer of these trademarks into the schooling system was illustrated by standardized curricula, standardized intelligence tests, grading policies, admission procedures, and accreditation rules, all to the end of preparing youth for the massified job market of standardized industry.

The following major themes emerged in the search for the relevance of this societal framework to the education system which has emerged.

- (a) The shift from prosumerism ( the same individuals producing what they consume) to a market economy in the industrial era which required separation of producers from consumers, and back again to a type of prosumerism at the dawn of the third wave. In the second wave, education was produced by teachers and consumed by students.
- (b) The resistance of those with vested interests in the prevailing era to changes that were required as technology and societal and individual needs evolved. Those of this bent tended to see only two options for the future, either Armageddon or more of the same (i.e. industrialization), only bigger.
- (c) The lack of recognition of the foreshadowing of the coming wave by those entrenched in the current industrial mindset. Old patterns, dogma, and ideologies did not fit emerging facts of changing geo-politics, technologies, modes of communication, classification, and concepts, yet the vested interests of the economic and political elite prevented them from gaining an objective view of this wave of change, setting the stage for revolutionary rather than planned change.
- (d) A shaping of the human psyche by the particular paradigms of the current era, and in the case of the industrial era, detailed as the perceived 'indust-reality', shaped by the

socio-sphere, techno-sphere, and info-sphere. The resulting psychocultural changes resulted in a new social character that had been shaped away from the agricultural psyche and based on views about objectivity-subjectivity, individualism, attitudes to authority, and so on. Peasants had to be given the rudiments of literacy, with education that not only informed but molded them for the factory mentality.

- (e) The trend toward mass mentality of the industrial era, and impact of the subsequent de-massification of the third wave. The third wave thrived on information that was not boxed in to the limits of the industrial paradigm such as the stress on standardized curriculum and testing in schools. Not only did the third wave de-massification affect information volume, but the delivery of products to the consumer became boutique-ized as consumers became less interested in the mass appeal of the product as they gathered recognition of their value as an individual in a de-massified society. There were implications here for core versus peripheral subjects in schools.
- (f) The new sensitivity of the 3<sup>rd</sup> wave corporation to things other than the financial bottom line and the inferences of this diversity for schools. Corporations were no longer responsible simply for making a profit or increasing production, but also for simultaneously contributing to solutions of the complex ecological, moral, political, racial, sexual, and social problems of the third wave society. Maclean's Magazine (Oct. 09, 2000) carried a full page display advertisement by 'beyond petroleum', under the banner "Is it possible to drive a car and still have a clean environment?". It asked the questions "Could business be about more than just profits? Could it be a force for good?" and answers "We think so, and the employees of BP, Amoco, ARCO, and Castrol are forming a new company, to try."



The industry clusters identified by Toffler as the likely backbone of the third wave were electronics and computers, the space industry, ocean exploration, and biological industries. The institutions that supported these industries would likely, similarly to schools, have to become multipurpose in nature. In fact industries were being held accountable in areas where the standards and the language of accountability had yet to be developed. Accountability was moving out of the narrow economic terms of reference. The implication for schools was to question whether schools have been as brave or forward-looking? The third wave individual as well as the corporation had multiple bottom lines, with paycheque not necessarily superceding personal fulfilment or value placed on family time; balance was the key issue. Industries have created equally weighted non-economic goals, and have strategized for the fulfilment and reporting of the accomplishment of these goals. This was juxtaposed against the back-to-basics movement in schools as the response to the failure of the mass education system. Contrary to the path that industry seemed to take in inventing new relevancy criteria, the schools rejected new educational strategies in favour of the second wave uniformity within which second wave effectiveness was more easily measureable.

(g) The employee characteristics valued by the new corporation (with implications for schools). In defiance of the logic of the market supply and demand chain, millions began to seek creative, psychologically fulfilling, and socially responsible uses for their energies and time, creating many economic contradictions. Skills of value centered around discretionary and shared decision making, resourcefulness, imagination, cooperation and teamwork, acceptance of responsibility, and adaptability

to changing circumstances, as opposed to the rote recitation of knowledge facts on demand.

- (h) The role of encrusted political institutions and classifications that seek the mythical majority viewpoint on which the second wave was founded. Synthesis of global policy was important as opposed to perpetuation of the insular development of any one country within a region. As the shift to fragmentized minority driven policy creation continued, governments who recognized perceived majority perspectives only sought mythical uniformity that may have been in parallel with the facade of the medium and message of the second wave school. The concept of unemployment was brought into question because it sought to classify school graduates as either productive or not based on their membership in the second wave job framework, perpetuating the producer/consumer chasm. Prosumers challenged the concept that the only work of value was that which was done for money, yet schools were still preparing students exclusively for this paradigm.

The theories and research of Toffler (1980), Reich (1991), and others concerned with new paradigm educational effectiveness were validated in the work of Gardner (1985), who created a framework for recognizing that there were intelligences in humans beyond the logical-mathematical intelligence that the schooling systems of the current era tended to recognize, value and promote. The author used a number of criteria to establish that the biological, anthropological, and psychological proclivities for various tasks and abilities actually qualified as separate distinguishable intelligences,. These intelligences . were subsequently critiqued against the backdrop of traditional theories of intelligence and learning, and contextualized in light of the human propensity for symbols, notational

and otherwise. The review concluded with an examination of the responsibility of truly effective schools to value and educate all these intelligences, and to find appropriate application for each.

Gardner started with a definition of intelligence that explicitly refrained from identifying the source of the ability or the proper means of 'testing' the capacity. An intelligence was the ability to solve problems or create products that were valued within one or more cultures. Only when educators got past tests that required logical-mathematical and linguistic intelligence to respond would there be a possibility of determining if there was a correlation among the separate intelligences. The current use of I. Q. tests allowed for the generation of a number upon which considerable emphasis was placed throughout a child's school career, and which determined the resources and options available to the child. This was often an accurate reflection of the potential of the child to succeed in school, but foretold little about the potential for success in later life, thus determining how 'smart' a child was through standardized tests and I. Q. scores had little to do with the effectiveness of schools. The problem solving ability of a child was another area that was exposed as mistakenly used to determine the general intelligence level. Piaget's (Gruber & Vonèche, 1977) belief that problem solving ability could be brought to bear on all areas of life through the use of pivotal intellectual tasks was viewed to be without foundation when one examined the types of problems that were presented as examples, all of which required use of logical-mathematical and linguistic intelligences.

Three views of intelligence and its development were presented.

1. Piaget's (Gruber & Vonèche, 1977) theory of interiorization, symbolization, and formal operations proposed a framework of intellectual development. A child made sense of the world through sensory perceptions, learned to act upon the objects of his environment cerebrally and with the use of symbols, such as words, gestures and pictures, and as an adolescent was able to figure out the implications that obtained among a set of related propositions through the use of logic. This development continued to the point where, in the end-state of human cognition, the child was able to express hypotheses, test them, and revise based on feedback. The author's critique exposed the orientation of this theory to the Western scientific and philosophical traditions. Applicable only to a minority of individuals even in the West, it ignored other forms of competence, such as those of an artist, lawyer, or athlete. Because there was a consistent framing of problems in the setting of the laboratory, the author believed that there was a fatal flaw in Piaget's theory in that problems were not considered that traversed the pattern of cognitive growth of most normal children.
2. The Information Processing approach sought to provide a millisecond by millisecond microgenetic picture of the mental steps involved as a child attempted to solve a conservation problem, from the point of delivery of information to eye or ear to the delivery of a solution issued by hand or mouth. The steps were so exhaustively described that they could be simulated by a computer. This form of information processing psychology failed to articulate the differences between various forms of cognition, instead supposing that a single generalized problem solving approach could be generalized across all types of human problems. Again the types of problems

solved by this process were very similar to each other and of the logical-mathematical variety.

3. The failure of the preceding views of intelligence and its development in the areas of biology, higher levels of creativity, and sensitivity to the range of roles in human society engendered an alternative view of intelligence and development, known as the Symbol Systems approach. According to Gardner (1985), symbols and human symbolic capacity have given rise to myth, language, art, science, and creativity in all fields. The course of human history has seen a shift from external behaviour to activity of the mind including use of various symbolic vehicles. The author and other researchers saw the development of symbolic activity beyond the Piagetian linguistic, logical, and numerical systems to encompass musical, spatial, bodily, and personal symbol systems. There was a recognition in this approach that cognitive development may occur in a range of domains, be they universal, culture specific, or personal. These domains could be negotiated differently, and in different ways by different individuals in different cultures based on the cultural influences that may have moulded their raw computational capacities. There was also a biological consideration for this developmental theory regarding the relation of the symbolic capacities based on cortex location and whether a capacity was natural or culturally stimulated.

As Gardner moved on to identifying the individual intelligences that emerge from the challenge of recognizing the proclivities of individuals and their intellectual development along different paths, prerequisites were established that were the general desiderata to which a set of intellectual skills ought to conform if it was to belong to the

master list of intellectual competencies. A human intellectual competency entailed the following:

1. A set of skills of problem solving that enabled the individual to resolve general problems or difficulties of the human experience;
2. Potential for creating effective products;
3. Potential for finding or creating problems;
4. The list of intelligences must capture a reasonably complete gamut of the kinds of abilities valued by human cultures.

The criteria, or signs, of an intelligence was posed as a subjective factor analysis and presented as a grounds for judgement so that other researchers could draw their own conclusions. They were:

1. Potential isolation by brain damage;
2. The existence of idiot savants, prodigies, and other exceptional individuals;
3. An identifiable core operation or set of operations;
4. A distinctive developmental history, along with a definable set of expert “end-state” performances;
5. An evolutionary history and evolutionary plausibility;
6. Support from experimental psychological tasks;
7. Support from psychometric findings;
8. Susceptibility to encoding in a symbolic system.

In specifying the qualities of the identified intelligences, Gardiner confirmed the distinction between acquired knowledge and the process of acquiring knowledge, and

between tacit and propositional knowledge, that is, the ability to do and the knowledge of how it works.

The seven intelligences that were propounded by Gardner as meeting these prerequisites and criteria were:

1. **Linguistic Intelligence** - The ability to see, in its richest form, the core operations of language. It included a sensitivity to meanings of words, the order among words, the sounds, rhythms, meter, and inflections of words, and the different functions of language. The linguistically intelligent individual was aware of the phonology and syntax of words and language. Four aspects of human language that were of importance in human history were the rhetorical aspect, the mnemonic potential, its role in explanation, and metalinguistic activity, the ability of language to reflect upon itself.
2. **Musical Intelligence** - The earliest of the intelligences to emerge, it operated in the child gifted in this area independently of language and was not bound to logical-mathematical skill. The child gifted in this area drew from music the subtleties that evoke emotional response, and built upon the three major building blocks of music: pitch, rhythm, and timbre. The auditory sense was crucial to the development of this intelligence, and it revealed itself in composition and performance.
3. **Logical-Mathematical Intelligence** - The most fundamental knowledge in the logical-mathematical realm was gained in interaction with objects, in their ordering, reordering, and assessment of their qualities. From here, this intelligence became remote from the world of material objects, and more appreciative of the actions that one performed upon objects, the relations between those actions, the propositions that

one made about actual or potential actions, and the relationships among those statements. The development was from sensori-motor to the realm of pure abstraction, ultimately to the heights of logic and science. Mathematical and scientific exploration spanned astronomical reckonings and universal harmonies as well as technological change and genetic engineering.

4. Spatial Intelligence - This was the capacity to perceive the visual world accurately, to perform transformations and modifications upon ones initial perceptions, and to re-create aspects of ones visual experience, in the absence of relevant visual stimuli. It was an amalgam of abilities, such as the ability to produce or manipulate forms. The development of one skill in this area led to the development of other related skills in the field. The ability to make ones way around in an intricate environment, such as the Eskimo in the seemingly homogenous polar regions, was an example of the influence of geography upon an intelligence's development.
5. Bodily-Kinesthetic Intelligence - Characteristic of this intelligence was the ability to use ones body in highly differentiated and skilled ways, for expressive as well as goal-orientated purposes. Resident also was the capacity to work skilfully with objects, both those that involved the fine motor movements of one's fingers and hands and those that exploited gross motor movements of the body. These two core abilities to control ones bodily movements and to manipulate objects with dexterity were exemplified in individuals like dancers and swimmers, artisans and instrumentalists. This intelligence often worked in concert with others in latter roles of individuals, such as inventors and actors.



6. **Intrapersonal Intelligence** - The development of the internal aspects of a person, the capacity to access one's own feeling life - one's range of effects of emotions was identified as intrapersonal intelligence. This intelligence effected the capacity to instantly discriminate among feelings and eventually to label them, enmesh them in symbolic codes, to draw upon them as a means of understanding and guiding one's behaviour. This intelligence spanned the gamut from being able to distinguish feelings of pain from feelings of pleasure, and act upon such feelings, to intrapersonal knowledge that allowed one to detect and to symbolize complex and highly differentiated sets of feelings. This intelligence was found in the novelist who wrote introspectively, in the patient and therapist who delved deeply into inner feelings, and the wise elder who advised based on a wealth of inner experiences. William James felt that self-knowledge was important for the smooth functioning of the whole community, while Freud posited that to know others was to know oneself better.
7. **Interpersonal Intelligence** - Turned outward toward other individuals, this core capacity was the ability to notice and make distinction among other individuals, and particularly among their moods, temperaments, motivations, and intentions. It allowed the young child to detect the moods of those around him and in its advanced form, permitted a skilled adult to read the sometimes hidden intentions and desires of many other individuals, and potentially to act upon this knowledge. This intelligence was often present in political, religious, and helping professions, as well as parents and teachers.

Significant amounts of information supported the alignment of the intelligences with the prerequisites and criteria earlier proposed, and a number of illustrations

throughout exposed the traditionalist, subservient view of education held by many invested in the current industrial era education paradigm. Musical illiteracy was acceptable, for instance, while linguistic development was stressed. The orientation to science as the 'religion' of core beliefs by which everything must be judged rigorously, systematically, and objectively elevated logical-mathematical intelligence to a necessarily superior realm. The question was posed as to whether the impact of schooling was to value the intelligences most suitable of the induction and regurgitation of information from all disciplines in a de-contextualized setting. Western theorists tended to ascribe value to the intelligences based on their ability to produce skills useful in a temporal and geo-specific setting, and to attribute supremacy to its ordering mechanisms and preferred media. The author pointed out that each intelligence had its own ordering mechanism, and the way that an intelligence performed its ordering reflected its own principles and its own preferred media. None was arbitrarily superior.

In a closer examination of criteria number eight, that the intelligence must be susceptible to symbolization, Gardner examined the functions of schooling and education. Education today referred to the process whereby children were introduced to, and came to master, the principal notational channels of their culture. The concept that certain intelligences allowed a better coping with the manipulation and codification of symbols, for the purported demonstration of mastery of that intelligence may have relegated education to the dubious task of deifying the logic and means of one intelligence's symbols over the others. Motivation and resources applied to the individual allowed achievement in any intellectual or symbolic domain, yet schools trained for roles that reflected the vested interests of the industrial era.

The tradition of schooling was examined in the context of the waning emphasis in Western civilization of interpersonal, kinesthetic and spatial skills and the emphasizing of linguistic and logical-mathematical propensity. Industrialized urban man began to lose sensitivity to people and events and learned to encode ever more numerous bits of complex information. There was a recognition that education may be evolving back to helping individuals reach their inherent potentials, as opposed to centring on economics.

Gardner discussed the assessment of the intellectual profile of the individual, including the move away from linguistically and logical-mathematical orientated I. Q. tests, and focused on more personalized education rather than training all for predetermined economic roles. It was important to pay attention to the biological and psychological attributes of students and the historical and cultural contexts of their lives in assisting society, through its educational systems, of reaching its larger, multi-intelligence-facilitating goals.

Stoll and Fink (1998) viewed the convergence of the economy, politics, technology, social structures and value systems as a shift to a post-modern era, which may have appeared to some to be chaotic, confusing, and diverse. In the midst of this the challenge for educators was to create relevant organizations that educated children in a way that allowed them to shape this new world for the better, instead of allowing it to dehumanize them. Within this time of flux there were forces for continuity and forces for change. These forces for stability and continuity were viewed as negative as they resulted in immobility because of their limiting structures of subjects, grades, departments department heads, streaming and selective schools.

The forces for continuity included:

- **Teacher resistance** - The vested interests of most people were usually bound up with the existing structure. They wanted to protect their program, their style, and they viewed change as something that was done to them as opposed to with them. They also faced the overload factor of many change initiatives, some of which were changed before they could bear results in the classroom.
- **Contextual constraints** - Because schools were nested within communities and districts and governments, the professional's idea of change might not have been consistent with the views of those in the culture at large, and thus those larger forces became brakes to change. Districts with strong bureaucracies were less effective in encouraging change in schools. Unions tended to be another resister to change. Universities that expected graduation from traditional subjects with conventional grading schemes also limited the flexibility of schools, as did subject communities with their vested interests in maintaining tried and true practices.
- **Focus on maintenance** - There was a tendency for schools interested in change to overreach and fail to attend to basic organizational and structural issues.

The approaches to change included:

- **Restructuring/Reform** - Top-down mandated changes operated at two levels, the classroom and the larger context of the school or the district. Initiatives such as centralizing curriculum or creating accountability testing limited teachers' professional judgement and reinforced the structure of schools. Such mandates tended to send the message that there were absolute scientific rules of teaching and learning that superceded the teachers' judgement in the classroom. Thus the teacher became less professional and more of a skilled tradesperson.

Most government restructuring initiatives tended to want to standardize every element of the education process, including outcomes, teaching strategies, governance, and accountability. This approach to treating students as commodities was based on changing what was visible and malleable as a symbol of the seriousness of the reformer, changing what was easiest (structures), and the removal of structural barriers that encouraged alternative approaches to teaching and learning. The key to reform was recognizing the non-linear aspect of schools and the need for teachers to be recognized as professional partners in educational change.

The authors summarized the four most common ways of viewing the purposes of education: humanist (preparation of students for citizenship so that they understand the values and traditions of their society's institutions); social efficiency (preparation of students for jobs and for contribution to the economic well-being of society as a whole); developmentalist (development of students' personal potential so that they were prepared to be creative, self-motivated life-long learners who were effective problem solvers, able to communicate and collaborate with others, and meet varied challenges through adulthood); and social meliorist (creation of a more just society through the use of the schools' resources to help those at risk children, and teaching about cultural and ethnic diversity so that students became open-minded, tolerant individuals).

It appeared that restructuring and reform by governments was mostly focused on the humanist and social efficiency models for the creation of competition and the application of market principals, with its winners and loser. Some of the results of this approach of applying market principles that were cited as bringing structural change to

education were voucher systems, charter schools, and grant maintained schools. The authors felt that these options removed support for public education, instead of motivating a move to a different paradigm of education.

The mandated site-based management of restructuring was seen as an attack on the equity issue that was the foundation of school effectiveness. Because the market factor was present, there was competition for administrators, teachers, and students, and thus elite schools could emerge that would have more effective reform programs, with no way to catch up for those losing the market battle. Those schools with the best resources moved ahead.

Streaming was viewed as another drawback to restructuring in that in the move away from integration and inclusion due to elitism and budgetary cuts, marginalized students were denied opportunity to achieve.

In summary of restructuring and reform, these authors concluded that management led structural changes did not often significantly impact on teaching and learning on the classroom. Restructuring would not keep up with the paradigm shift that social forces required. It may have led to more teaching for the test so that management could be praised for the success of structural change.

- Reculturing - Various contents and forms of culture included observed behaviour, language and rituals, working group norms, dominant values, organizational philosophy, and the overall feeling of an organization.

In an attempt to consider elements of the education process other than programmes and procedures, reculturing was identified as the process of developing new values, beliefs, and norm, new concepts about institutions and new

professionalism for teachers. It was separate from planning and restructuring, and focused on beliefs and relationships, and what happened when they were central to the change process. Schools moving toward effectiveness had a shared feeling among staff members that they knew where they were going, and an educational meaning that was present throughout the organization. Effective schools of the future, those that met the needs of all students and promoted interrelationships and interconnections would develop cultures that promoted both collegiality and individuality. The culture of the student and the community needed to be included because these could serve as brakes against extremism and provided balance in the change process. Reculturing might be the answer to enhancing the effectiveness of schools because it moved beyond the rational into the non-rational, non-linear aspects of change that were most relevant to the needs of individual students.

There were certain problems that must be considered if reculturing was to succeed. The holistic approach to teaching that moved away from the traditional industrial paradigm might be seen as idealistic, but in a democratic society that promotes quality and equity, to undervalue the minds of its citizens would be a waste of its most important resource. In a job-insecure world, to be able to motivate students with the high expectations so important to outcomes was a constant dilemma for teachers. The conception of leadership needed to change as well from the strong hand of managerial leadership to encouraging the leadership of leaders. All those involved in the educational process were intuitive, creative, reasoning individuals, and should be enabled and empowered through invitational messages to help shape the process. Understanding of the context of teachers lives would help in understanding their

values, and schools needed to be de-politicized so that negative competition for students and resources was removed (Stoll & Fink, 1998).

Reich (1991) brought into focus the need for education systems to produce symbolic analysts, those students who through their educational experiences had developed the basic skills of abstraction, systems thinking, experimentation, and collaboration. Effective education must lead to students that have these skills in order to maintain a competitive edge in the job market of the new century, where there were increasingly less demands for the jobs of the old footsoldier of capitalism and high volume enterprise, such as the assembly line worker. Even the job classifications of the U. S. Census Bureau, which in 1943 started using socio-economic factors of income and prestige to classify jobs, denoted an old paradigm of success which was perpetuated by labelling the vastly changed employment landscape with misleading categorizations, where in a world economy, the job of a sales or technical sub-category could be far more prestigious or lucrative than that of a managerial position. The old structure was inhibitive of the new paradigm.

At mid-twentieth century, the American educational system was a good fit for the prevailing structures of high-volume production within which its young products were to be employed. The standard assembly-line curriculum mirrored the national economy, with its divisions of subjects, time, sequential grades, standardized test, and rejection of defective units. In contrast, by the 1990's, the economy had undergone a drastic shift while the form and function of education had not. Despite the cries of the masses that schools had deteriorated, they had not: they had simply not kept abreast of the changing times. The call for education reform was most often a call to recapture a vision of 'the



good old days', with a return 'back to basics'. This was simply a call for a return to the days when schools prepared students for the standardized economy, which in a globalized, demassified marketplace, and the onslaught of the Third Wave (Toffler, 1980) no longer existed.

Wirth (1993), as if responding to the 'Second Wave' traditionalists, clarified that there was more demand currently in the world market for the new paradigm skills of the symbolic analyst (Reich, 1991) than for the traditional production skills of the old paradigm. "In the past 15 years the individuals who have these (symbolic analysis) skills have prospered; those lacking them have increasingly fallen behind" (p. 364). McKenna (2000), in "The Battle of Economies" reported that "Millions of large and small investors have embraced the view that a New Economy... was muscling the Old Economy out of the way forever" (p. B7). Conveyor belt economy and education were both in decline, yet the vested interest factions of the industrialized twentieth century were trying to perpetuate one through the other (Reich, 1991).

The true measure of effectiveness of an education system was whether its vision was to prepare individuals for the world of today and tomorrow, rather than the world of yesterday. It was one that appreciated the transient nature of facts, and valued the emergence of skills of how to conceptualize and solve problems, rather than memorization of facts that had been interpreted by others (Reich, 1991). The existence in the U. S. of zones of symbolic-analysis activity, such as Hollywood (music and film), Wall Street (global finance), and the Silicon Valley (computer technology) was a demonstration of the generation of plans, designs, images, formulae, and strategies that were strategically brokered into other symbolic-analytic zones around the world. There

was more economic activity in these zones, and they required more of the new paradigm skills, than was required in the rest of the declining second wave industrial economy to which many wished to cling.

The second order change that Daniels (1993) spoke of rested on a challenging of the aims, content, and procedures of the activity of education itself. It included a devaluing of actual knowledge of facts and acknowledged the value of 'education' as opposed to 'schooling', where schooling connoted institutionalization and early twentieth century paradigms, and education was teaching with the particular aim of trying to get students to understand their world better than they otherwise would. The criterion of pellucidity was introduced as argument for not continuing to indoctrinate students in the values and procedures of the industrial society that had exerted so much influence on the shape of schools, but instead to educate for the purpose of helping each student to reach full potential with no regard for market pressures.

Wideen's account of Bath College's Global Futures Project (as cited in Wideen, 1994) zeroed in on new paradigm concepts of wider world orientation, alternative futures, decision making skills, and active and responsible citizenship. A list of new paradigm pupil outcomes included motivation, anticipation of change, critical thinking, values clarification, decision making, creativity, a better world, citizenship, and stewardship. In looking at the value of knowledge in the new paradigm, Wideen was more concerned with the nature of learning rather than actual curriculum and pedagogy.

In considering the characteristics of the effective school in the new paradigm sense, Wideen (1994) pointed out the disappointing results of attempts at quick fixes. It

was important that the movement not be trivialized by the pretence of plastering over a weak school with certain characteristics and expecting to realize new outcomes.

Carlson (1996) referred to the need for the controller of the school situation to exercise the law of requisite variety, that is, for that controller to have a greater repertoire of insights and experiences than that of the system to be controlled. This allowed for the breaking with past experiences and paradigms and for the infusion of new perspectives and conditions. There was the need to rise beyond the metaphor of the organization with its implicit stress on efficiency, and to look to new models and paradigms that stressed a new effectiveness.

The role of the reflective practitioner was to develop new approaches and insights that would present a challenge to move beyond the 'efficient organization' paradigm. Educators who needed to be in control, considered only one's own view of what needed to be accomplished, practiced self-protection, stressed rationality and minimized emotionality, and limited choices and risk-taking were urged to move beyond single-loop learning to double-loop learning, where one was comfortable sharing control, minimizing defensiveness, increasing opportunities for free and informed choice, and monitoring the implementation of ideas (Carlson, 1996).

Howard's (1986) research in the area of school improvement was intended to be used by leaders to assist in vision building for schools that would meet the needs of students in the 21<sup>st</sup> century. The instrument that was provided was validated by educators and futurists who were familiar with futuristic studies, and developed with assistance from the University of Denver, Bureau of Educational Research, and other consultants.

The need for such an instrument was illustrated by the substantial body of knowledge that had been developed concerning the significant changes that were occurring in society, changes that affected basic operating structures - beliefs and values, concept of family, earning and spending patterns, and production of goods and services. The question for society was what implications did these changing patterns have for its education system?

Similar to the questions posed by the SIM Consulting Group (undated, p. 97, this review), the 27 item instrument summarized the authors' and validators' responses as each item found a thread of consensus in the futurist literature. There was a deliberate attempt to avoid being overly influenced by the opinions of educators who were mostly involved in the effective functioning of industrial age schools.

This view of a new era in education was reflected in the works of The National Commission on Excellence in Education, The Task Force on Education for Economic Growth, the Carnegie and Atlantic Richfield Foundations, and significant works by Goodlad andSizer (as cited in Howard, 1986). Specific trends were traced from the work of Goodlad, Gardner, Sizer, and the Carnegie and Atlantic Richfield Foundations to illustrate the major shift that was occurring, including:

- a recognition that occupations were now more centered around processing and dissemination of information than the production and distribution of goods;
- high tech/high touch;
- decentralization;
- globalization;

- replacement of the ‘give hard work, get material goods’ mentality with ‘give hard work and sacrifice, get self-fulfilment in family, life, career, leisure, and the workplace itself’ mentality;
- learning how to learn;
- ‘synthesis’, a time of large scale thinking, putting the pieces back together.

Skills of decision-making, problem solving, creativity, critical thinking, communication, evaluation, analysis, synthesis, and problem analysis were necessary in this new age. Further, these skills should be taught to all students, of all intelligences, so that all could reason in a sophisticated manner. The research turned up little evidence of any benefit to continuing narrow job-specific skills curricula, or of isolating vocational education into tracks which removed the possibility of instruction on the higher level thought processes.

The threads that ran through the futurist literature and, according to Howard, from which schools should be taking their lead, have been summarized. They were the information explosion, increasing pace of change, primacy of social problems, and increasing importance of personal fulfilment. These themes may lead to a curriculum that was personal, individualized, life-long learning based, and built on a platform of humanistic psychology. This was the basis on which society’s image of the future could be more accurately projected onto its youth so that it was prepared for the world of tomorrow.

Recommendations of how a school improvement plan could be entered into in order to relate the outcomes of the school to preferred outcomes included:

- form a management team;

- gather base-line data regarding achievement and symptoms of quality;
- initiate awareness activities;
- build and assess vision ;
- set priorities;
- organize task forces;
- manage and support task forces;
- collect benchmark data.

The building and assessment of vision was a key factor in this linkage. The concern was in recognizing what the needs of an emerging society were and how the school could prepare the students of today for them. There were several steps to be followed in the effective construction of vision, which differentiated between other planning processes and vision building, including avoidance of a reflection of the biases and preferences of educators and others who perhaps had a vested interest in determining what schools produced.

### 3. Educational Effectiveness

It was easier to grasp the perspective on efficiency held by many writers and researchers as one recognized their assent to the old paradigm. Much of the literature revolved around this paradigm, and its inputs were evaluated by these authors in light of outputs, or immediate impact on the knowledge base of the student. Many writers called this outcomes, but failed to distinguish between academic progress outputs and true outcomes of preparation for life in a contemporary world. The historical perspective of

the school effectiveness movement showed its evolution around short term, academic output measures. Slater and Teddlie (1992) displayed this pervasive mindset in their definition of school effectiveness. The effective school was one in which students exhibited higher achievement scores than one would have predicted knowing only the socio-economic characteristics of their parents.

Townsend (1994) reported on the findings of a study of Australian schools during 1990-1991 regarding the task and role of effective schools. The authors suggested that it was not enough to state that a school was effective if it produced a result, but rather that it was necessary to associate values with the results being produced, in light of the various groups who were impacted by the outcomes that a school produced. These groups included students, parents, community members, and the state. If school effectiveness was related to the achievement of educational goals at the local, system, or national level, then these groups' conflicting views of what the goals of education were would bring differing definitions of what effectiveness was. One of the major problems in arriving at a consensus about school effectiveness was in resolving the dissonance in the priorities of each group.

This review presents a survey of this old paradigm effectiveness as context for valuation of the new.

### Framework of Improvement and Effectiveness

Stoll and Fink (1998) provided an orientation to the concepts of school effectiveness and school improvements. As a result of the Coleman report (Coleman, Campbell, Hobson, McPartland, Mood, Weinfield, & York, 1966). which concluded from research involving 60,000 students in 4,000 schools that schools were far less influential

than home background on student development, a number of researchers set out to illustrate the impact that school did have on the outcome of students. These researchers illustrated four factors that were impacted by schools. They were focus on outcomes, emphasis on equity (all students could achieve), concept of progress (value added by schools moved students further than S. E. S. would indicate could be expected), and consistency (some schools were more effective than others).

Stoll and Fink wrote of problems with the traditional school effectiveness approach to change. First of all, the definition of effectiveness tended to evolve down to making schools effective in the 'here and now', rather than considering the impact of the fast changing world in which schools existed. The new emerging demands of the twenty-first century were for employees who would demonstrate flexibility, creativity, problem solving skills, confidence with information technology, and ability to cooperate in the workplace. Schools would need to lose their preoccupation with standardization, measurement, and rationality, and instead should concentrate on issues such as teacher activities, student involvement, principal contribution, parent and communities involvement, and relationships between individuals and groups and to school policies, procedures, and external organizations and agencies. It was also important to consider the relationships within the layered contexts of schools and how schools affect their larger contexts.

Secondly, these writers spoke of the inappropriateness of attempting to transpose features of effectiveness in one context to a different context. This usually did not work across cultural lines because of socio-economic status, technology, economy, and politics



as impacting features of effectiveness projects. Cultural context usually played a large part in attempting to transpose findings from one country to another.

Thirdly, there was also a similar concern in attempting to generalize effectiveness projects from elementary to secondary schools. Stoll and Fink (1998) concluded that knowing what effectiveness characteristics were was different than knowing how to bring about that change, which was referred to as school improvement.

Purkey and Smith (1983) had earlier voiced the same sentiment. Because schools were loosely coupled organizations, and because the same input would result in different outcomes in different settings, there was error in labelling schools that did not adopt a “package” of reform incentives as uninterested in increasing effectiveness. School culture, the linking of content with process in a dynamic process, created personality and climate in each school.

School’s climates emphasized academic achievement, or affective growth, or social development, and school effectiveness must be measured against the backdrop of the culture in which it operated and the expectations placed upon it. The school culture model suggested that changing behaviours and attitudes as well as organization and norms was a more direct route to enhancing effectiveness. Culture and climate congruence required a strong and influential leader to shape the conditions that would lead to improved effectiveness.

Creemers (1994) discussed the early research into school effectiveness as a search for a cause and effect relationship where isolated factors could be identified and inserted into individual school settings to create improvements in a uni-dimensional concept of effectiveness. Edmonds’ “5-Factor Model” (as cited in Reynolds, Teddlie, Creemers,

Scheerens, & Townsend, 2000), of strong educational leadership, high expectation of student achievement, an emphasis on basic skills, a safe and orderly climate, and frequent evaluation of pupils' progress, was prominent in the early literature. Creemers criticized it as having several inherent flaws, including whether these factors were causes or effects, whether the basic skills being measured were relevant to the affective domain, the dependence of the factors on each other, and the locus of the factors, i.e. whether they impacted the school, classroom, or student level. Creemers argued that a better conceptualization and methodology was required, with multilevel examination and application at the school, classroom, and learning outcomes of individual students, and an understanding that there was an interaction among these variables.

The effectiveness of schools as measured by their outputs could be influenced approximately 12% to 18% by school and classroom factors, such as time on task, opportunity to learn, and effective teaching, as defined by a series of correlates (Creemers, 1994). The remaining input to effectiveness was provided by the students' characteristics, such as SES, background variables, and aptitudes. Providing a recipe for success was dangerous because of the lack of research that considered the interrelation of factors, and the value of broad definitions of effectiveness.

Stoll and Fink (1998) cited the significant contributions of the school improvement literature as focus on process (initiating, implementing, and institutionalizing change), an orientation toward action and on-going development, an emphasis on school-selected priorities for development, a view of schools as the center and focus of change, and an understanding of the importance of culture (as an advocate or inhibitor of change).

They also cited several weaknesses in the school improvement approach to educational change. First, there was a suspicion that the contrived collegiality that was achieved from top-down mandates was simply a way to cajole teachers into accepting external mandates of centralized curriculum and standardized testing, so that the work of economic reconstruction could be advanced. They warned educators of improvement strategies initiated by corporatist governments to pander to the powerful groups that contributed to their campaign war chests. Secondly, it was easier to believe that because school effectiveness came from school improvement, and because rationality and linearity was the way most dealt with change, that the management level would create cause and effect strategies. This worked only for the narrow focus of the predictable, but was inappropriate in the often unpredictable realm of the school improvement issues. There was no recipe for effective schools that could become the school improvement path of all schools (Stoll & Fink, 1998).

Hargreaves (1998) presented a critical review of the Ontario Harris Government Education Reform Act, referred to as Bill 160. The basic premise of the bill was that reform could be imposed and that the result would be school improvement that would result in effective schools.

The relevant provisions of Bill 160 in terms of their implication for the working conditions and professional learning opportunities for teachers were that:

- secondary teachers would have reduced school day preparation time;
- professional development days would be reduced, while non-classroom days would be increased;

- principals and vice-principals would be removed from the teachers' collective bargaining unit;
- non-certified personnel would be introduced to non-classroom roles.

The author's responses to these concerns were:

- Elsewhere in the world, major education reforms have demoralized teachers, tarnished the image of the profession, created recruitment crises, and divided teachers from managers;
- Because teaching was dramatically different today from when politicians remembered it, demanding a much broader skill level of teachers, models of reform that provided support for rather than removing it from teachers would gain public credibility if teachers were able to gain the public imagination on this issue;
- Opportunities and time for professional collaboration outside the classroom were closely related to standards of student achievement inside the classroom;
- There was no clear separation between what was inside the classroom and what was outside the classroom, considering that guidance counsellors and librarians were most effective when they were integrated in the complexities of classroom learning.

Hargreaves concluded that teachers were indispensable to any educational reforms. Changes with clear ideas and actions built into them that were designed to help teachers get better on the job would provide the increase in the standard of student learning that everybody wanted.

### History

Slater and Teddlie (1992) illustrated the history of the foundations of theory of school effectiveness, citing the static model of Edmonds proposed in 1979, and the

process-product studies of Brookover and Rutter in the same year. The process-product research continued in the mid 1980's with Mortimore and Teddlie, with attention being focused on both the stability and context of school effects. Based on these findings, Slater and Teddlie felt that continued production of empirical data should be replaced by construction of a true theory of school effectiveness.

According to Townsend (1994), the definition of effectiveness expanded during the 1980's research to include, beyond academic components, social and personal development. In 1989, the Australian Education Council (p. 128) included five areas - curriculum areas, social justice, national economic development, appropriate knowledge, skills, and attitudes, and overtly economic goals - in their effectiveness definition.

A perceived difficulty here was that these goals could only be addressed in practice in schools, yet they could be listed by educational authorities as goals. The research showed that there were three areas of general agreement between teachers and parents as to the direction schools should be taking. They were (a) academic or intellectual pursuits, (b) personal and emotional development, and (c) social, moral, and citizenship skills.

Townsend's study found that the role of the effective school was related to success of all the children in the school. Schools were now much more focused on providing students with the skills they needed to function in society, and as the nature of society changed, so must the role of the school and its curricula change.

Sarason (1995) wrote of the failure of the educational community to take into account the needs and wishes of the parents and students in an individual way. This was the direct result of school governance whose aim was to tame and socialize immigrant

children, to make children become what educators wanted them to become, and to force them into an efficiency mould that allowed them to be classified by age, ‘ability to learn’, and other limiting characteristics, so that they could all be dealt with in an efficient classroom-oriented school where mass production of graduates was the goal.

Specifically, the goals of schools were to:

- Cope with children by classifying them, (exclude individuality);
- Put into children “knowledge-facts” considered essential for citizenship and work;
- Emphasize training, passivity, memorization, and answering (exclude education, thinking, active learning, and questioning);
- Create efficient classrooms - Pedagogical concern was on how to organize the classroom, the authoritarian teacher, discipline, instillation of a predetermined curriculum (exclude individuality, do not ask what were the psychological characteristics of the child, or what they could become).

Scheerens and Creemers, and Levine and Lezotte, (as cited in Slater & Teddlie, 1992) were credited with the actual construction of theory, with the postulation of a comprehensive conceptualization of school effectiveness involving context or contingency theory, where the above the school level, the school level and the classroom level were impacted by factors such as teacher preparedness, opportunity to learn, and time on task. In Slater & Teddlie’s article, (1992), a framework was developed that added three key elements of management and leadership (at the school level), faculty preparedness (at the classroom level), and student learning readiness (at the individual pupil level) to Edmond’s (as cited in Reynolds, Teddlie, Creemers, Scheerens, & Townsend, 2000) 5-factor model (strong educational leadership, high expectation of

student achievement, an emphasis on basic skills, a safe and orderly climate, and frequent evaluation of pupils' progress).

There were correlates of school effectiveness, and school improvement was presented as an ongoing process in which schools were either getting better or getting worse. Thus for schools to be effective, there needed to be appropriate administration (able to deal at the structural, or social interactions network, level, and the cultural, the shared orientation and beliefs, level), teachers prepared (possessing the will and the skill) to teach, and students ready (desire and capacity) to learn.

Slater and Teddlie (1992) provided a list of characteristics of unusually effective schools (p. 248) as follows.

#### School culture

- commitment
- cohesion
- focus (on achievement and problem solving)
- high expectations
- recognition of high performance

#### School structure

- principal visibility/discipline
- teacher evaluation
- teacher feedback
- teacher input
- teacher support
- teacher recruitment

- staff development
- salient parental involvement

#### Classroom culture

- high expectations
- high engagement
- cohesion
- focus on Higher Order Thinking Skills & Higher Order Learning Skills (e.g. problem solving skills).

#### Classroom structure

- grouping
- pacing
- time use
- integration
- monitoring of student progress

The article concluded by providing a typology of school effectiveness and leadership. Remembering that schools were either progressing or regressing, the change of any one of the factors earlier mentioned would lead to subsequent chain reactions that would move the school to the next phase. There was a significant interaction between the three factors in context that would eventually move the school ahead or backwards. The typology gave rise to three postulates: things fall apart if left to themselves, selection was a faster way to bring change than development, and it was easier to change small groups or an individual than large groups.



Windham (1990), in expounding on the distinction between effectiveness and efficiency, concentrated on the impact of educational production and the benefit to the economy. This perpetuated the concept of output based, system serving effectiveness, although there was some allowance for the distinction between outputs and outcomes at the end of the monograph. Efficiency was a comparison of effectiveness with cost, and was the more inclusive term. Market oriented efficiency might be lost in schools because as publicly funded institutions, the competitive, self-monitoring edge was lost, and so bureaucratic incentives were relied upon.

Windham continued with a discussion of inputs, process factors, outputs, and outcomes. The list of inputs included student characteristics, teacher characteristics, school characteristics, instructional material and equipment characteristics, facilities characteristics, and administration capacity. This author did not include home and community environment because they were not within the control of the school administration. It was easier to measure the availability of resources than their utilization. Efficiency suffered when resources were not used promptly because of up front acquisition costs, and diminishing value of resources.

Process factors included forms of instructional organization and administrative behaviour, alternative technology, and use of instructional time by teachers and students. There was a positive correlation with effectiveness when administrative behaviour was centered around helping and training rather than problem solving.

Teacher time was spent on administrative tasks, instructional tasks, and evaluative tasks, and related to instructional groupings (full class, sub-group, individual), and parts of the instructional task (preparation, instruction, review, and remediation). Student time

was evaluated under the criteria of form of interaction with teacher and other students (full class, small group with teacher present, small group without teacher present, individual tutorial with teacher, working alone), and form of material used (no materials, textbooks, instructional support materials, audio-visual equipment).

According to Windham, output was the immediate effect of educational activity and was categorized into four areas.

- Attainment effect: Attaining a level of education was a positive indicator of effectiveness because producing graduates was a desired outcome.
- Achievement effect: This was the most common output measure, usually with testing as the measurement device. Tests were seemingly objective measures, lent themselves to comparisons, traditionally promoted discipline and effort, and in standardized format, promoted centralization of educational authority.
- Attitudinal/Behavioural effects: Harder to quantify, or see how classroom behaviour and process related to these characteristics.
- Equity effects of equality measures: This was a statistical measure, expressed in attainment, achievement, and attitudinal/behavioural measures, of dispersion and group differences.

Outcomes were measured by quality of employment, earnings, status, attitudinal change, and behavioural change.

#### Inputs to Effectiveness

Anderson, Weinstein, Strykowski, and Walberg (1994) provided a list of inputs to school effectiveness that illustrated the broad perspective that must be taken in order to grasp its true nature. Their list included state and district variables, out of school

contextual variables, school level variables, student variables, program design variables, and implementation, classroom instruction, and climate variables.

Stockard and Mayberry (1992) expanded on the environments of groupings of students, learning climates, school facilities and size, and community environments. These environments were examined in light of their impact on academic achievement, which the authors equated with occupational attainment and income, which was their measure of eventual adult success.

Groupings of students: Minority students performed better in desegregated schools, and tracking students into lower achieving groups lowered performance. Teachers and students were more likely to hold higher academic expectations, better behaviour, and devote more time to academic learning in higher tracks. Girls and minority boys were less distracted with socialization aspects of schooling when in same sex groupings. These findings were not consistent with current practices, where racial, social status, and academic achievement groupings were still predominant, within districts, schools, and classrooms.

School and classroom climate: Climate in the school setting could be thought of as organizational culture, which was the shared orientations that gave a distinctive identity. Specifically for classrooms, environments were affected by effective teaching, and effective climates. It included four components:

1. High academic expectations that engendered correlating results;
2. Effective leadership that involved instruction and cohesive relations, and offered help and built morale in a human relations style;

3. An orderly atmosphere, without rigidity, that maintained rules and values that mapped out the schools values and goals;
4. Warmth and respect for others in a circle of causation where students and teachers built on each others expectations and achievements

School resources and school and classroom size: School resources did not bear a direct relationship to school effectiveness because of the non-linear relationship caused by the many other factors that impact on the use of resources, including school policy, teacher creativeness, socio-economic background, etc. There may be a relationship between the allocation of resources and community needs, which implicated the effectiveness of schools in differing need communities. School and classroom size had a greater impact on effectiveness, which may be caused by the processes linked with size rather than the size itself. Smaller classrooms tended to have greater behavioural control, more individualized instruction, and more enriched curriculum. Students tended to exhibit more personal efficacy, better self-concept, heightened sense of self-control, and better behaviour.

Community environments: Stockard and Mayberry's (1992) review of literature implied that student achievement would be enhanced in community environments with a large number of high achieving peers, high interaction among community members and with school officials, community members and parents involved with school, and mutual respect and community values that support achievement. These characteristics existed in close knit communities, either geographically or values sharing. These types of communities could, however, promote insularity, a retention of insular values and perspectives, and limited emphasis on academic achievement.

Stockard and Mayberry (1992) continued by providing the following theoretical basis for the foregoing patterns and trends, which were not exclusive to , but certainly applicable to educational institutions.

1. The group, as well as the individual's own background, influenced the individual.
2. Human behaviour was multilevel in nature, and was influenced by various groups in differing ways. Organizational behaviour was influenced by the individuals that they comprised.
3. Social order and social action were dependant on each other. Order was shaped by action, and congruence between them was essential for effectiveness to be enhanced.
4. Institutional requirements and structures influenced and limited the type of interactions that individuals had.

These authors provided some policy recommendations. They stated that effective schools should be heterogeneous in nature, with heterogeneous learning groups, be relatively small, with small classes, and have administration that:

- could develop school climate of student commitment to each other;
- were skilled expressive and instrumental leaders;
- could enhance academically related norms and values;
- could develop work environment where teachers collaborated on decision making;
- could develop governance that included parent and community, and tolerated and resolved conflict over goals.

Hallinger, Murphy, and Hausman (1993) listed (a) decentralization of the organizational structure of schools, (b) empowerment of teachers, parents, and students to reshape the direction of the education system, and (c) transformation of the teaching-

learning process that occurred in the classroom from an entrenched psychological model to a sociologically oriented perspective among the results of their research with teachers and principals as influences in schools that created a move to effectiveness.

Walberg (1984) worked within a framework of inputs such as defined costs, both financial and human, and outputs of achievements and reports of attitudes and behaviours. The promotion of efficiency required an identification of the following nine factors that should lead to increased cognitive, behavioural, and affective learning. Raising of achievement factors one to five was not solely within the grasp of educators, since there were many stakeholders in the education process.

These factors were:

- Student Aptitude

1. Ability or prior achievement as measured by standardized tests.
2. Development, as indexed by age or stage of maturity.
3. Motivation, or self concept, as indicated by student's willingness to persevere on learning tasks.

- Instruction

4. Time spent learning.
5. Quality of instruction.

- Environmental factors

6. The home.
7. The classroom social group.
8. The peer group outside the school.
9. Use of out-of-school time (particularly T. V. viewing).

The author encouraged the further testing of these hypotheses, stating that as in medicine, agriculture, and engineering, as experimental findings were synthesized and implications implemented and evaluated, that human welfare would improve. The use of time both in and out of school was crucial to effective results in the education process.

Some of the common themes related to school effectiveness from Stringfield's (1994) review of literature included strong curriculum leadership, high expectations for students, good atmosphere (sense of purpose, quiet, orderliness), strong emphasis on reading (focus on basics, and staff development), use of phonics, individualization, (attention and responsiveness to individual student's needs), careful evaluation of pupil progress, reading as a priority instructional goal, principal or specialist provided active leadership in the reading program, attention to basic skills, availability of breadth of reading materials, active communication of ideas across teachers, principal participation in instructional decision making, principal responsible for hiring new staff, high self-expectations for principal in role of program leader, high teacher expectations for students, programs cohesive and in-school priority, and parent involvement.

Stringfield added the value of an administrative team that had a good balance between administrative and instructional skills, and recognized that "pull-out" special programs for students were not as effective as well coordinated in-class programs. The value of heavy emphasis on testing was recognized as well. It was found that improving schools included a strong emphasis on program goals, high expectations of students, acceptance of responsibility for learning, more time in direct instruction, a principal as instructional leader, teachers accepting accountability, and dissatisfaction with the status

quo. This list concluded with added curriculum leadership and instructional efficiency (utilization of time, personnel, materials and money to maximize student outcomes).

#### Research: Variety and Decline

Various types of research were evident in the literature on effectiveness.

Stringfield (1994) used a series of outlier studies to support the promotion of academic achievement as the benchmark of school effectiveness. Outlier studies were studies of unusual cases, those that did not conform to the expected patterns. There were several types of outlier studies: those that examined the positive exception only, that contrasted the positive and negative exceptions, that compared positive and typical situations, and that compared the positive and negative exception to the typical situation. The advantage of these studies centered around the cost saving that they afforded, where large random samples could be avoided, and exceptions to the norm could be examined in an attempt to isolate the variances that supposedly created the differentiated outcomes. The drawback in this type of study was the limited sample size, the lack of agreement of what the norm was, and thus what the exceptions were, and the threat to the validity of the whole study of observers that made semi-independent judgements about individual cases.

Hallinger, Murphy, and Hausman (1993) used in-depth interviews with teachers and principals concerning their perceptions regarding the potential impact of decentralization, empowerment of students, and transformation of relationships on the reinventing of public schools. What really came to the forefront was that in the in-depth interviews with both principals and teachers, an analysis of their main concerns and themes concerning education reform did not take them beyond the classroom door to the



pedagogical end of the education spectrum. Instead their concerns centered around the preservation and sharing of the system in its current structure.

Sammons, Thomas, and Mortimore (1997) reviewed the results of statistical examinations of increasing grade levels in traditional subjects. The exception to academic achievement and favourable test results as the desired outcomes of effective education was in low socio-economic sector schools, where measures of things like attendance, commitment, independent learning, and develop of respect for self and others, were among the desired outcomes. The authors expressed concern about the trailing edge, the bottom thirty percent of students who were poorly served by academic effectiveness measures, and indicated that researchers were stymied in their exploration of ways to get students' grades up.

Beyond outlier studies, interviews, and statistical analysis, several researchers proposed models of school effectiveness that allowed for a closer examination of the intricacies of effectiveness at various levels, from the school level to the classroom level to the student level. Cheng (1997) created 25 blocks in a chart that would help one focus on what type of effectiveness was being evaluated or monitored. This became three dimensional (a matrix) when time frame was considered, and led to examination of efficiency as well as effectiveness.

Cheng posited that a school may be high in several types of effectiveness but not high in others. Also, increasing effectiveness at one level did not necessarily increase it at the other levels. This author's models of school effectiveness incorporated a chart, conception of school effectiveness, conditions for model usefulness, and evaluation indicators/key areas. Models of school effectiveness were noted, including:

- Goal model: assumed clearly stated and generally accepted (among the constituency) goals for measuring effectiveness, and agreed upon outcomes. This was usually not the case and so this model was severely limited;
- Resource-input model: recruiting, facilities, resources and financial support from many levels were indicators of effectiveness. This model was useful if the connection between input and output was clear.

Creemers and Reezigt (1996) modeled examinations of effectiveness on the three levels of the school organization: the level above the school (board), the school, and the classroom. Much research focused on the impact of school factors but did not consider the moderating effect that the classroom had on these factors. The authors found that there were three areas that all three levels of the school organization impacted upon that could be directly linked to student learning outcomes. These areas were (a) quality of instruction (educationally and organizationally), (b) time, and (c) opportunity to learn.

These items did not stand alone. Research pointed out that components or isolated elements of effectiveness did not result in strong results on student achievement. When longitudinal effectiveness was at stake, there were four formal criteria whose presence enhanced effectiveness across instructional components, subjects, grades, and classes. They were:

1. Consistency: There should be consistency at the school level in providing conditions for effective instruction related to curriculum, grouping, and teacher behaviour.
2. Cohesion: All members of the school team showed consistency of effectiveness characteristics. This guaranteed effective instruction between classes.

3. **Constancy:** Effective instruction was provided to students during their total school career. There should be little or no differences in instruction between classes or grade levels. Constancy guaranteed consistency and cohesion over the long term.
4. **Control:** Evaluation of student achievement and teacher behaviour, and presentation of a quiet and orderly school climate was necessary to achieve results. It also referred to teachers holding each other responsible for effective instruction.

Windham's (1990) exemplar of major factors in the education production system included a) inputs, b) processes, c) outputs, and d) outcomes, however this may have been an inappropriate model because there was a tendency to ignore relationships between inputs, which was classified as processes. Also, there was variable technology, and subjective valuation of outputs and outcomes. The efficiency analyst ameliorated the decision makers process, with improvement, not the attainment of the ideal, as the goal.

Reynolds, Teddlie, Creemers, Scheerens, and Townsend (2000) listed among seven reasons for the decline in research of school effectiveness the following:

- Scathing criticisms of this type of research after the mid-eighties, when Gardner et al. (1983) published the nationally acclaimed (USA) report calling for a return to the basics in order to stay competitive with other industrialized nations such as Japan.
- During the Reagan/Bush years in the U. S., research funding plummeted and departments of education became more interested in monitoring academic achievement rather than new research.
- Many researchers became more concerned with statistical analysis of academic achievement, rather than with the educational ramifications of their research.

Hallinger, Murphy, & Hausman (1993) found that research was challenging to their subjects. The results of their study were more significant for what they showed about the self-preservation tendency of the groups than what was revealed about the actual reform of the in-classroom learning process. Principals generally reported that they were not willing to be on the hot-seat to defend group decisions, that teachers would not want decision making authority when they realized the time commitment that came with it, and that teachers generally did not understand the real financial structure of the schools. Teachers felt that principals would not really share power even if mandated by the board, and would circumvent any such directives by their superordinates. Both groups felt that parents did not really understand the true education structure or issues and would slow the process to a point of unproductivity. The need was to find a way to share information about the restructuring of curriculum and instruction, as opposed to limiting the reforms to education governance.

#### Academic Effectiveness and Economic Outcomes

So far, an examination of the distinction between effectiveness and efficiency, history, methods and models of study, and inputs to effectiveness has centred around effectiveness as it pertained to short term outputs that were concerned exclusively with academic performance outcomes that led to economic benefits, as opposed to longer term outcomes. This focus of effectiveness researchers continued through the eighties, nineties and into the new century.

Sammons, Thomas and Mortimore's (1997) view of effectiveness in education was exclusively contextualized in the domain of increasing grade levels in traditional subjects. Effectiveness was meaningful if it promoted different measures of educational

outcomes (all focused on measuring academic test performance), stability of these effects over time, and differentiated effects (impact on homogeneous groups of students).

In summarizing the impact of planning, management, and feedback as parts of the teaching process, each of Sammons, Thomas and Mortimore's 16 items listed for reflection and constructive criticism centred around the control of the canon through clear goals and emphasis on academic achievement for students of all ability levels.

Conformity to the standard could be enhanced by teachers' emphasis on high expectations, control of classroom activity, independent learning, student progress based on assessment and monitoring, and a consistently applied marking policy. This approach provided an apt example of Gardner's (2000) criticisms of schooling in a uni-intelligence environment, using one model or entry point only, for displays of a limited range of intelligences that encouraged competition and comparison in a framework biased by a utilitarian philosophy of education.

Windham's (1990) discussion of outputs exemplified the many theorists and researchers that ended their examination of school effectiveness with outputs. In attempting to improve outputs effectiveness, the "triage" method of using resources on those judged by teachers to have the best chance of success caused inequity. Windham pointed out that efficiency and effectiveness were important because education was the second largest public expense, behind policing and defence, and because of the impact of ineffectiveness and inefficiency on developing economies. Three proposals were put forward.

- “ 1. Train and upgrade all educational decision makers in principles of decision making, and teach the necessity of efficiency analysis.

2. Establish and monitor effectiveness and efficiency benchmarks within the education system.
3. Develop and maintain educational management information systems based on principles of efficiency analysis” (p. 135).

Teddlie and Stringfield (as cited in Stringfield, 1994) found in studies of effective schools high to moderate time on task, high to moderate interactive teaching rates, ability to make academic sense of academic tasks, and teachers that exhibited planned academic push, who articulated academic plans, and who regularly sought to learn new instructional and curricular options. The schools were friendly but serious places, showed high respect for academic time, had accurate schedules and well coordinated resource classes. Principals knew the academic structure of the school, actively recruited new teachers, focused staff development activities, and moved ineffective teachers out of the building. School libraries were active and academically oriented, and student honour rolls were prominently posted.

Teddlie and Reynolds (2000, pp. 142-143), in illustrating effective schools’ characteristics identified in two recent reviews, listed Levine and Lezotte’s (1990) characteristics concerning curriculum as emphasis on mastery of central learning skills, and a mission focus on achievement (of academics), and Sammons, Hillman and Mortimore’s (1995) as academic emphasis, and focus on achievement. Teddlie and Reynolds, in listing the processes of effective schools, detailed two components within the category of developing and maintaining a pervasive focus on learning - focusing on academics, and maximizing school learning time (exposure to the academic achievement paradigm). Wideen (1994), in discussing the background context of school effectiveness

referred to the curriculum reform period of the eighties as bearing some good in that it “accomplished several things that were of lasting importance, for instance, the strong emphasis taken toward subject matter, beginning with mathematics and science...” (p. 14).

Cheng (1997) felt that long term effectiveness was harder to recognize than short term effectiveness, and that discussion of effectiveness versus efficiency boiled down to non-monetary versus monetary issues. These were often the dividing points for the brand of effectiveness desired by many school administrations .

Not only were many researchers concerned with academic performance as the dominant measure of effectiveness, but many were interested in looking beyond outputs to outcomes only as they related to the economy. Hanushek (1994) spoke of effectiveness from an economic perspective by articulating the views of the Brookings Institute. This prominent voice of industry was a private, non-profit Washington, D. C. based organization devoted to research, education, and publication on important issues of domestic and international policy. Founded in 1927, it merged the voice of the Institute of Government Research, the Institute of Economics, and the Robert Brookings Graduate School of Economics. This organization promoted the view that education’s societal benefit was in its ability to provide workers with more and better skills. More education in the sciences could accelerate the growth rate of the economy. School effectiveness was contextualized in statements such as “Continued investment in education can, according to existing estimates, have significant effects on the U. S. economy” (p. 22), and, this “investment must lead to performance improvements, or quality gains (in core areas), by students” (p. 23).

Studies of the effectiveness of education during the mid-Eighties did not always lead to recommendations of how to overcome the shortfalls that were illustrated (Howe, 1983). The mid-Eighties feeling that the education system was not effective in America, in a macro sense, was illustrated by several factors, including a fear of losing a competitive economic edge, fear of falling behind the Russians, declining test scores, and state sponsored studies.

Howe felt that there were three areas of concern as this research on the perceived ineffective education system came to light.

1. Keep alive the renewed interest

- continue to hold public hearings into national reports
- create a clearing house of information
- provide grants for action on recommendations
- respond with legislation to recommendations

2. Assign priorities and responsibilities

- achieve greater consensus on the goals of education, and their priorities
- develop a common core
- stiffen subject and skill requirements
- attract better teachers
- renew focus on basic skills
- turn principals into leaders
- partner schools with business

3. Deal with issues not showing up in the current research

- deal with the cost of these improvements



- business needs to call for increased taxes for educational spending as an investment in the economy, not an expense.
- use technology to minimize costs
- do not focus only on high school education, but consider the whole system
- fulfil the equity agenda,
- do not make materialistic goals the prime motivation for education: the schools mission was broader

### Testing for Effectiveness

A number of writers spoke of the place of testing in creating school effectiveness, which according to the perspective of the old paradigm, entailed supplying students who were schooled in the industrial format. The aim of educational activity for many was output, and the academic achievement effect was the most common outputs measure, usually with testing as the measurement device (Windham, 1990). Tests were seemingly objective measures, lent to comparisons, traditionally promoted discipline and effort, and in standardized format, promoted centralization of educational authority.

One of these techniques was Terman's IQ tests, which measured logical mathematical intelligence and attempted to categorize the respondents according to their ability, and inadvertently or otherwise, their value. This paradigm of intelligence led to the belief that learning was sequential, an individual activity, and avoided the use of tools. The emerging hierarchy of intelligence marginalized artisans as tool users, as illustrated in the devaluing of music, drama, visual arts, technical subjects, and business subjects in secondary schools, according to Hargreaves, Fullan, Wiggins, Stager, and Macmillan (as cited in Fink, 1995).

In assessing change to new paradigm effectiveness, Stoll and Fink (1998) indicated that the most significant problem was a scarcity of appropriate measuring devices and instruments because many of the effective schools researchers focused on the conventional market ideology through limiting standardized tests. Their tendency was to test what was easy to grasp and fitted the 'bottom-line' mentality, ironically ignoring the equity origins of the effective movement. The solution was not to define effectiveness in a narrow way which facilitated vested interests in creating raw scores that showed that educators were measuring up, but to cope with an increasing complex environment and to provide answers that would be valid in the long term. The measures currently used could indicate if the process was functioning, but not if the intended outcomes were being reached. The challenge was to develop and promote assessment literacy that would pull students forward with their abilities, not limit them based on outdated assessment techniques, and to avoid rationalist reductionist assessment.

A critical view of standardized testing was given by Gardner (2000). Success of the effectiveness of a particular school vision could be measured by giving students many opportunities to perform their understandings under various conditions and by receiving regular useful feedback as well. These means of assessment could be taken from the entry point, analogy, or symbolic representation used to introduce the topic, and which provided a suitable means for gauging a student's understanding. Many of the current testing policies were fundamentally flawed in that they focused on testing the amount of knowledge accumulated, once the mark of an educated person, instead of measuring the capacity and flexibility to solve new problems and explore new lines of thought.

Wideen (1994) focused on the weakness and confusion in the field of effectiveness by drawing attention to the willingness of many of its proponents to use standardized tests as non-problematic indicators of success, without their asking anything about the outcomes, or longer term impact of schools. There was often a distinct limiting of the types of outcomes that were actually measured, with many of the students' skills and abilities left unappraised and undervalued. Stoll and Fink (1998) also reported that in an attempt to measure effectiveness, schools resorted to measuring with standardized tests, which pay relatively little attention to children's skills and abilities. Governments tended to use effective school findings from the 1970's and 1980's as devices to force outdated change on present day schools. In some situations the use of decontextualized standardized test, I. Q. scores, and narrow measures of educational purpose perpetuated inequity and educational reductionism. Schools were reduced to their measurable parts, ignoring the connection, emotions, and relationships of the humans in the schools.

#### Centralization and Standardization

Some researchers saw school effectiveness and ability to adhere to a new paradigm entwined with the issue of centralized control and standardized operating procedure. Not all supported centralized control through national standards. Whitaker (1993) stated that the imposition of a national curriculum might inhibit "the capacity of schools to introduce programmes geared to a world in which constant change and uncertainty were the norm" (p. 15).

Finn (1984) explored the question of whether more was to be gained through the enhancement of individual schools by giving them more authority and discretion, or

through centralization and standardization, bearing in mind that schools were neither cost centers or Army units, so other factors needed to be considered.

Because schools were loosely coupled organizations, creating chain reactions through affecting one part of the system was difficult. Further, schools were essentially uniform in the public domain, yet they were not only concerned with the output of academic achievement. Members of the school community shared common values and beliefs that dictated the common goals that often blurred the line between private and organizational.

Much of the focus of the 1980's was on performance criteria, and the development of tools that students needed to meet the criteria. The problems of fixing one problem while creating others, and leading the public to think that there was indeed a quick fix available needed to be considered. Most change occurred when the leadership could articulate their goals for improved effectiveness in a five-year time frame, so patience and foresight were required.

Finn's (1984) guidelines to resolving the arising centralization dichotomy were presented.

1. Recognize the school as the key organizational unit in public education.
2. Set rigorous standards for the system, emphasizing broad goals and essential outcomes, instead of curriculum, procedures, or timetables.
3. Encourage school differentiation apart from the system's core of cognitive skill and knowledge.
4. By selecting and nurturing first rate leader principals, and removing weaker ones, enhance school leadership.

5. Give the principal a stronger hand in the selection and deployment of school professional staff.
6. Encourage a recognition of differences in skill, experience, and interests among a collegially motivated staff.
7. Move more budgetary responsibility to the local school.
8. The functions of teaching, learning, and internal organization should not be inhibited by system policymakers. Too much effort was spent trying to work around bureaucrats.
9. Recognize the long term cyclical process required in improving school effectiveness.

Cheng's (1997) work on monitoring school effectiveness centred around whether school efficiency would be improved in a centralized system. The following practical dilemmas illustrated this:

1. balancing between internal development and external accountability;
2. balancing between school self-evaluation and external evaluation;
3. choosing an appropriate combination of indicators;
4. deciding who selects the effectiveness indicators and performance standards;
5. managing the differences between the school site level and the system level.

In tracking a Louisiana study in a five year follow-up, Teddlie and Stringfield (1993) found that both stable and change status could be tracked to the classroom, and changes in the classroom could be tracked to the stability or change at the school level, and these school level changes were much more attributable to personnel changes at the individual school than to district or state programs or reforms.

Stoll and Fink (1998) spoke of the tendency for government to view education improvement as best accomplished by a move to centralization, effectively deskilling teachers and devaluing their judgements. Questions about what students learn, when they learn it and how they demonstrate their learning tended to be bureaucratized.

Governments centralized professional issues of curriculum and assessment, and decentralized business and maintenance decisions, and because schools often bought into this move away from their professional standing, they lost power to impact the direction of educational change, and often got blamed for government decisions.

An item recently delivered to all homes in Ontario clarified the methods that its provincial government believed would bring to fruition its presumed mandate of standardized, centralized, industrial paradigm schooling. "Learning For Life" (Ontario Ministry of Education and Ministry of Training, 2000) promoted standardized curriculum for K-12, province-wide standardized tests, and job preparation skills to boost the economy.

Framed in old paradigm effectiveness, Knight (1993) spoke of financial decentralization. According to the plethora of legislators in Western countries who were swarming to the concept of school based financial management, one could easily conclude that there was a direct link between decentralization and achievement of more effective outcomes in schools. Financial delegation empowered those in the school to exercise some shaping of the process, but this creation of the allusion of choice did not necessarily relate to improvement of student based outcomes, and was usually not without strings attached which left the scope of decision making ultimately within an above the school level.

The delegation of financial responsibility to schools affected the principal, deputy principal, department heads, senior school staff, teachers, and governing bodies/local school councils (Knight, 1993). It brought new concerns regarding time demands, participation and consultation, planning, administration, information technology, innovation, accountability, funds augmentation, between and within school fund allocation, as well as concerns about the delegation of central services. Mostly anecdotal evidence supported this trend to devolution of financial management. There was no evidence available, according to Knight, to support the claim that financial devolution improved the student outcomes, but there appeared to be improvements in the process, such as enhancement of teaching and learning conditions. There appeared to be the addition of extra elements of increased flexibility and additional choice, and school management, planning and participation were enhanced.

Knight concluded that instead of focusing decentralization of financial management on the freedom to spend money on different inputs, educators should be considering the values of expenditures on different outputs, such as contracting for specified level of outcomes, and freedom to change 'suppliers'. Financial delegation could also allow room for alternative learning strategies, such as variations on traditional forms of teaching, 'free school' learning approaches, individualized learning, and supported self-study, computer assisted learning, distance learning, and community resource usage.

### Variety of Effectiveness Measures

Cheng (1997) made the case for a broader perspective of effectiveness beyond academic outputs. This writer held the view that it was necessary to clarify the aims and functions of a school before discussing for a particular school what effectiveness was and how to evaluate and monitor it.

Purkey and Smith (1983) wrote that effectiveness went beyond easily affected materials, programs, and facilities changes. Research has shown that effectiveness was not improved by spending more money on resources and facilities. The most direct effects were achieved through manipulation of variables at the classroom level, and those at the school level that governed classroom activity. Up to the early eighties, the main ingredients of an effective school were thought to be strong administrative leadership, high expectations for children's academic achievement, an orderly atmosphere conducive to learning, emphasis on skill-based learning, and frequent student progress monitoring, as well as efficient use of classroom time, parent involvement, goal specific staff development programs, and effective principals.

Davis (1989) clarified that the institutional culture reflected the pattern of basic assumptions and beliefs supporting its methods of operation. These beliefs were adapted from the culture in which it existed. Cultures were hard to change, but organizational effectiveness required leadership which would build policies that created cultures which were predisposed to supporting concepts of effectiveness. Policy implied an allocation of values throughout a system, and it took skill and sensitivity to create the congruence required for the culture and the policy to move in the same direction, towards effectiveness. Teamwork was required.



As do other authors, Davis challenged the tendency to link educational effectiveness simply to high academic achievement. He considered other factors such as quality of student life in the school, “hidden curriculum”, and nature of teachers’ work. There was a fear that allocation of resources to increase effectiveness in one domain might create ineffectiveness in another.

Because organizational culture was the key to effectiveness (Davis,1989), recognizing its components was essential. Educators and others who attempted to manipulate educational effectiveness tended to deal with the artifact level (buildings, technology, policy documents), while the second level, values, and the third level, assumptions, tended to be ignored. Schools accommodated the external societal pressures from society, systems, and political entities through changes in the first level. This often led to changes in official policy but did little to change culture, whose essence was derived from the relationship among individuals.

“What seems to be apparent was that the majority of effective school strategists were working at the artifact level of culture rather than at the more important but also more complex levels of values and assumptions” (p117).

The foregoing discussed the two major hurdles of creating school effectiveness: defining effectiveness, and moving to the more profound levels where change will be truly effective. It was essential also to remember that any change toward effectiveness must bring the culture along with it.

Davis (1989) provided factors that should be incorporated into truly effective policy planning and its implementation:

- Policy - reflecting the culture and history of the organization.

- Leadership - culture must be developed to support the planned changes. Collegial collaboration was essential.
- Goals - must be based on an encompassing vision of the values and assumptions that underlie the school, which must be translated into meaningful components.
- Climate - clear expectations for student and staff performance must be set, communicated, and consistently applied.
- Symbols - curriculum, award systems, newsletters, behaviour codes, symbols, etc. must convey message of what the school really values.
- Evaluation - its thrust must be to monitor the progress of the school toward realizing its goals. Principal and staff evaluation will become less stressful as policy details the nature, process, and use of the evaluation process that measures the movement towards meeting of the stated goals (educational effectiveness).

In summary, Davis posited that a positive organizational culture that showed care for individuals and commitment to excellence was essential in any plan to increase educational effectiveness.

A synthesis of research done during the 1980's (Northwest Regional Educational Laboratory, 1990) focused on effective school research that identified schooling practices and characteristics associated with measurable improvements in student achievement and attitudes and excellence in student behaviour. These were the desired outputs which linked the research that was summarized here.

The list of inputs that it was felt lead to an increase in this broader context of effectiveness, and around which the research was categorized, included school effects, teacher effects, instructional leadership, curriculum alignment, program coupling, and

educational change. These findings were organized into three sections, focusing on the three levels of the school organization: the classroom, the school, and the district. In each section, groups of practices were gathered into practice clusters, and then into cluster groupings. The supporting research was listed at the end of each section, and provided a basis for change that would lead to broader student success.

Sarason (1995) supported the abolition of the existing school governance, based on the ideas that there was a political principle that entitled everyone affected by decision or policy to have a relationship to the decision making process. Of particular concern was the impact of schooling on parents, who entrusted the school system to assist in the development of each child to their full potential, and the student, on whom the school's policies were directly enacted. The failure of the educational community to take the political principle seriously was found to be a large contributor to a perceived ineffectiveness of the school system by the public.

#### 4. Visioning Strategy Linked to Educational Effectiveness

Whether it was referred to as policy, goals, plans, vision, or by some other designation, many writer and researchers have linked the impact of visioning strategy to the outputs and outcomes that were achieved incidentally or otherwise by educational organizations.

### Influence of Industrial Paradigm

Denison (1990) laid an organizational framework for studying effectiveness in the corporate culture. Adaptations of these ideas have been carried over to schools, which allowed a more precise understanding of the functions of educational effectiveness.

The author started with a discussion of organizational culture, the underlying values, beliefs and principles of its management that had meaning for the individuals and the organization. Their values and beliefs must turn into policies and practices to become the source of effectiveness. The following four hypotheses, authenticated by detailed examples from major corporate settings, supported this assertion.

1. The Involvement Hypothesis: High levels of involvement and participation created a sense of ownership and responsibility.
2. The Consistency Hypothesis: Implicit control systems based on internalized values were a more effective means of achieving coordination than external control systems that relied on explicit rules and regulations.
3. The Adaptability Theory: Dealt with the external environment of the organization A system of norms and beliefs that could support the capacity of an organization to receive, interpret, and translate signals from its environment into internal behavioural changes that increased its chances for survival growth, and development.
4. The Mission Hypothesis: The importance of a shared definition of the function and purpose of the organization and its members.

Denison debated culture and climate as the major internal and external shaping forces on the organization, and then moved on to consider the criteria of organizational effectiveness. The various measures of organizational effectiveness included the

stakeholder (natural systems) model, the goal attainment (rational systems) model, the decision process model, and population ecology model.

Morgan (1986) stated:

“The mechanization approach ... tends to limit rather than mobilize the development of human beings to fit the requirements of mechanical organization rather than building the organization around their strengths and potentials” (p. 38).

Carlson (1996) illustrated the restrictive symbolic carryover from the industrial age to education of the machine view, which limited human beings, and shaped and valued those parts that fit the requirements of the mechanical organization, rather than shaping the organization around the strengths and potentials of humans. The paradigm of critical thinking that went beyond traditional scientific thinking and drew on the humanities to deal with the subtle, aesthetic, and incidental side of human nature was cause to discover personal biases and limits that have been placed on schools by the resulting constructs.

Shareef (1994) centered on the importance of the leader in improving effectiveness in an organization, and in the function of change stressed the value of working through the culture of its individuals and subsystems. These business theories carried over to leadership in educational institutions where improvement in effectiveness was needed.

The author gave two theoretical models that were used to trigger strategic transformations when effectiveness improvements were required. The first was the human relations approach, which proposed that strategic organizational cultural change was motivated by one lead factor, such as the vision of a leader who was able to work with the

underlying cultural values of the organization , espoused by its members, to bring about change centered around a market need or resource availability.

The second model was the subsystems congruence theory, which proposed that in order to bring about change in organizational behaviour, it was necessary to change the multiple organizational forces, or sub-systems that changed and shaped behaviour. Many factors within the culture would have to change to be consistent with the desired future state, or vision, of the organization. The fit between the systems determined the outcomes, based on the interdependence of the organization's systems. Shareef pointed out that public systems lagged behind private businesses such as Proctor-Gamble, Sherwin-Williams, General Foods, and Taco Bell in using subsystems congruence, or shared vision, to effect strategic change.

Clark (1988) examined the issues that pertained to the achievement of effectiveness in a non-school setting, and looked at the interdependence between the systems in a company that must be in concert in order for change to be effective and lasting. Consideration was given to the alignment of production (actual outcomes producing), political (hierarchical interconnectedness), and cultural systems (beliefs, traditions and values of both the organization and its individuals) of a company that would be affected by levers, or specific action focus points, for change if there was "a reasonable degree of congruence among the three" (p. 27).

The system developed a tolerance and support of each component as it shared common goals of production, understood the symbiotic relationship of the components, and shared historically developed values in order for the systems to work together. There must also be a development of these characteristics within each system, so that each

member was connected not only vertically, but horizontally as well. The author clarified that there must not only be alignment “between” these three systems, but alignment, or congruence, “within” the levers in order for change, motivated by mission statements or other triggers to be sound.

The interdependence between the systems that must be in concert in order for change to be effective and lasting was carefully examined. The levers for change that needed to be aligned were mission or strategy, task analysis, formal organization, people, control, and informal organization. Clark stated regarding the impact of change on people, that people would adapt to change if they believed their efforts would lead to results that they valued.

### Leadership

In order for visioning strategy to be linked to school effectiveness, certain leadership characteristics were valued. Kotter and Heskett (1992) pointed out that in order to change culture, leadership was required, as opposed to effective management. Visionary leadership embodied a new vision and set of strategies that included: (a) action, communication of core values and behaviours; (b) values, giving full consideration to the organization’s constituencies; and (c) behaviour, centering on the institution of strategies relevant to the current environment. By drawing attention to communication, constituencies, and environment, these writers were building a case for congruence within the organization in order to promote effectiveness.

Leithwood, Jantze, and Steinbach (1999) provided insight into the impact of leadership styles on the fulfilment of vision. These authors concentrated on outlining direction-setting leadership practices that accounted for a very high proportion of the

success of school leadership in restructuring situations. Specifically, this article concentrated on direction setting through building a shared vision, developing consensus about goals, and creating high performance expectations. It was assumed that a statement of direction for the school (vision or mission statement) had no long term impact on the effects of the school unless there had been a widespread commitment to that direction by those affected by those directions. The article focused, then, on how such commitment could be created.

“Included among those leadership practices relevant to developing such vision were not only practices aimed explicitly and directly at building a shared vision, but also practices giving rise to organizational members’ inspiration and attribution of charisma” (Leithwood et al., 1999, p. 56).

There were two types of leadership qualities spoken of in this statement, charismatic and vision building. The evidence available to identify these characteristics was from different sources. Evidence about charisma and inspiration was largely from attributions made by followers about the qualities of those believed to be charismatic or inspirational, while the evidence about vision building leadership was the presence of specific behaviours engaged in by leaders with their colleagues.

One of the sources of power attributed to transformational leadership style, the category into which charismatic leadership fits, was personal power, which grew out of the perception that charismatic leaders possessed valuable expertise, as well as other unique attributes and characteristics. These characteristics gave rise to the ‘feel’ that their followers must have for their leader and his mission, so that the leader was regarded with reverence, dedication, and awe. Charismatic leaders were either ‘visionary’, and inspired



their followers to endorse and believe in their personal vision, or crisis-produced, which was the case when a leader was perceived as being able to offer a way of at least beginning to deal with the crisis circumstances. These characteristics were not always separate, and charismatic leaders generated increased optimism and enthusiasm about work. They exercised power in socially positive ways and were a source of pride to have as colleagues. Colleagues viewed them as symbols of success and accomplishment, and they were considered to have unusual insights about what was really important to attend to; they were highly respected by colleagues.

On the other hand, the leader who assisted colleagues in identifying and articulating a vision, but may not have been attributed with charisma by colleagues, acted to identify new opportunities for the organization. The ability to develop, articulate, and inspire others was a critical part of leadership theory in relation to creating excellence in an organization. Nanus (as cited in Leithwood, Jantze, & Steinbach, 1999) dedicated his 1992 book Visionary Leadership to the concept that the most valuable engine in an organization was the leader who could drive it toward excellence and long-range success through the formulation of an attractive, worthwhile, widely shared, and achievable vision of the future.

Leithwood et al. (1999) listed eight research based identifiable leadership behaviours associated with vision building. They centered on actions that helped colleagues find uniting purpose, engaged staff in vision development, provided the framework of vision that included others' views, helped colleagues see the result of working together to change practices, tied vision to practical implications for programs and instruction, made the link between external initiatives for change and school vision,

assisted in building understanding of the larger implications of the school vision, and communicated the vision to all stakeholders and the school community at every opportunity.

### The Paradigm-Dependent Link

The American Association of School Administrators (1999) brought the importance of relevant and inclusive visions into focus in the following statement:

“Schools and school systems...have done a noteworthy job of preparing students for the industrial age; fewer have systematically decided how they will prepare students for the 21<sup>st</sup> century. Therefore, if we continue on our present path, we’ll be preparing students for a world that no longer exists” (p. 1).

Cheng (1997) listed the aims and functions of a school around which a vision that leads to effectiveness could be constructed, and which formed the basis for its evaluation.

Potential school functions were classified into five types:

- technical/economic function: extent to which the school contributed to technical or economic needs of the individual, institution, local community, society, and international community;
- human/social function: school contribution to human development and social relationships at different levels of society;
- political function: development of political knowledge and understanding, civic attitudes and skills, creation of political norms and stability;
- cultural function: cultural transmission and development at all levels of society;
- educational function: development and maintenance of education at different levels of society (content, system and structure at all levels).

Historically, the focus has shifted from factors merely related to effective schools and classrooms to what explains learning outcomes. Attention was now being paid to factors that relate to effective schools in a cause and effect relationship (Creemers, 1997). The author focused on vision as it related to teachers and what they actually did as a way of relating to the formal criteria for educational effectiveness, and pointed out that student learning at the classroom level as a result of what happened in the levels above the classroom was a move forward in effectiveness theory.

Creemers (1997) formed a link between school policy to the classroom impact on the student. Time on task and opportunities used at the student level were influenced by time for learning and opportunity to learn that the teacher provided at the classroom level, and these were influenced in sequence by the quality of instruction. Time, opportunities, and quality instruction were found to be factors which must be part of a school context, and school and classroom policy in order to be effective. Student achievement must be viewed as the result of all levels' input. The upper level's influence was mediated by the classroom level.

Creemers clarified that because effectiveness was at stake, that the means of pursuing the objectives and beliefs about education were the formal criteria and factors that led to educational effectiveness. Educational effectiveness was more likely to be achieved when an appropriate vision provided a basis. Sometimes inappropriate visions existed that were not clearly related to educational effectiveness factors. Creemers also pointed out that there was little or no empirical evidence to support the idea that there were isolated factors that fall in a direct line to educational effectiveness, especially as evidenced at the classroom level. This led the researcher to assume and expect that there

was a certain drive that led the parts of the system to strive for effectiveness by providing effective instruction and creating conditions at other levels to enhance the likelihood of this occurring. The drive referred to here was the direct offshoot of vision. In a school, the collective concept of norms and values, as related to aims and functions of the school and the tasks and positions people have, was vision. In education, this was not an abstract idea but became concrete when related directly to behaviours and outcomes in schools and classrooms. A vision was the total of values and norms about education and the specific place, task, and function persons had, based on the context they lived in and related to what they actually did. Because there was by definition a tendency to pursue what one internalized as belief (values) this created some level of motivation to pursue effectiveness.

Teachers who shared a vision were constantly aware of time, opportunity and quality as it relates to learning in the classroom. They expected consistency, cohesion, constancy and control from the other levels of the system, including curriculum support, coaching, and professionalization. Creemers added the tag “that work” to his discussion of visions because of their need to be strongly related to concrete behaviours in schools and classrooms in order to be effective.

The Strategic Design Process for Focusing on Powerful Learner Performances (SIM Consulting Group, undated) posed questions that addressed the issues of what successful outcomes actually were and who should input to these decisions. The following two questions directed attention to true outcomes of the education process.

“In what arenas and contexts of living will our students need to function effectively and be successful in the future? In other words, for what aspects of life are we going to prepare them?” (p. 5)

“What learner results and performance demonstrations must be established in order for students to be prepared to meet the arena-specific problems/challenges/opportunities, components and competencies?” (p. 5)

Education outcomes should meet the demands of the “seven spheres of living” (p. 36), which were work, civic, global, cultural, relationships, learning, and personal. This was non-directive framing for outcomes-based visions, as opposed to the outputs-based academic achievement directives of theorists who built the platform for many school vision statements.

Clowes (1991) presented four variables that were essential in bringing about change in organizational culture. They included (a) common values shared by a critical mass of the organization’s personnel, (b) a symbiotic relationship between the organization and its personnel, (c) leadership committed to empowering its personnel, and (d) a shared vision, a common purpose within the organization.

Hansen (1994) listed six features that school systems interested in reform and future readiness must incorporate, and stressed as one of these features the absolute necessity for those within the system to perceive and understand the relationship between their own goals and objectives and those of the system as a whole. If not, that individual would create resistance or friction in the organization by becoming a source of unfocused or diffuse energy. Hansen stated that it was very important for the managers of the system to frequently review these relationships and their importance to the overall

effectiveness of the system. Another of these features was the clear communication of the vision, mission and goals to the clients of the system, that is, the students, the community, parents, and other stakeholders. Hoy and Miskel (1996) demonstrated linkage between vision and effectiveness by referring to the performance outcomes, such as achievement, job satisfaction, absenteeism, and overall quality performance that showed goal accomplishment. This tied in to organizational effectiveness, which measured the degree to which the actual outcomes were consistent with expected outcomes.

Hargreaves (1997) presented five paradoxes that demonstrated the challenges that faced educators in distinguishing between what was policy and what was practice.

1. Parents wanted schools to stress things for which they themselves have given up responsibility. (Zero tolerance for violence and prominence of violent video games in homes.)
2. More centralization and more decentralization. Schools took responsibility for choice and diversity, yet competed and compared.
3. Globalism created tribalism. In a global marketplace, and with distance eliminating electronic communication, schools were more ethnocentrically focused on preserving nationhood and local standards and values.
4. Diversity and integration were accompanied with emphasis on common standards and specialization. Teachers were required to look at multiple intelligences, learning styles, the development of problem-solving and critical thinking skills and interdisciplinary links, yet there was a growing obsession with standardized tests,

international comparisons and competitive tables of performance. Valuing of what was assessed instead of assessing what was valued.

5. Future orientation created nostalgia for the past. Back to the basics and the strengthening of traditional skills was often the response of those who did not recognize the value of the development of problem-solving and critical thinking skills for success in the future.

The illusion of control and pretence of accountability was often preserved through the top-down approach. The old paradigm policies must give way to new paradigm approaches, with visions for the future that are not stilted and directive. Visions and Missions must be reflective of agreement on where the school and its culture are headed, and must be viewed as shared journeys, not destinations. The emotional input of teachers must not be eliminated in a quest to instil knowledge, skill, and cognition in students through teacher development that was exclusively rational, calculative, managerial and stereotypically masculine (Hargreaves, 1997).

### The Process in Practice

Leithwood et al. (1999) described an actual vision building process, which was based on a general understanding of the principal's vision, becoming more formal, participatory, and process orientated, once its value was understood. This particular process was conceived, driven, and implemented primarily by one vice-principal, and became very inclusive. The vision was not cast on the staff but was built from the ground up, based on the initial framework of the principal's ideas. The process took about a year. The vision became a working tool immediately, and was used as a guideline to establish priorities regarding distribution of resources, increase of graduation rate, reduction of use

of foul language in the school hallways, and other measures of effectiveness for this school. The vision was not static, it was constantly revisited and served as a stimulus for assessing progress, and was the basis for establishing new priorities in subsequent years. The vision was described as being clear, meaningful to individual staff members, inclusive in its development, and the basis for determining school priorities.

In linking the vision to goals, Leithwood et al. (1999) developed the thought of vision building being the fundamental ambitious sense of purpose likely to be pursued over many years, while focus on goals was the opportunity for organizational members to accomplish specific results in the short term in order to move towards the vision. Goal setting as part of the visioning process had its roots in the 'initiation of structure' as the means of defining followers' tasks. This role defining behaviour continued, and the authors identified ten of the common elements of how goals were set by school principals. There was significant overlap in these items with the vision building leadership processes, with identification of items such as recognition of process, consistency between goals and school vision, priority of goals in relation to the vision, frequent reference to stated goals when guiding change, and acknowledging compatibility between personal and shared goals.

Leithwood et al. (1999) formed a link between the curriculum in schools and the place of vision and goals. The teachers' personal identification with the goals was often found in assisting each student in the meeting of their needs, which was a reflection of the personal meaning of the school vision. Consequently teachers strove to find ways to recognize and build on the capabilities of all students, so that the drop-out rate was reduced. Thus teachers did not just stand and lecture, group work was in, and



interpersonal skills were recognized as necessary to the students' success outside the school. Interactive, cooperative learning was the result of the drive to achieve the goals that were the result of the focus created by the vision. The school's goals were centered around the students' needs and characteristics, within the framework of the school vision.

In the area of creating high performance expectations, the first impact of this initiative was that there might be a recognizable gap between the aspirations espoused in the vision regarding high performance and current accomplishments. There were six practices identified by Leithwood et al (1999) that were common among school leadership successful in this area. They included expectation that staff would be hard working and professional, with unflagging commitment to student welfare; they espoused norms of excellence and quality service, did not accept second rate performance, established flexible boundaries that were still within the context of the school's goals, and knew what was right and good. These high expectations were part of the school's vision for the teachers and administration, as well as for the students.

Stoll and Fink (1996) presented a detailed analysis of the impact of a school district's vision, and its top-down, bottom-up approach to implementation. The Halton Board contained 44,000 students and 83 schools (17 secondary). Typical 1970's bureaucracy had a top-down implementation method, with policy from the board rigorously enforced in schools through supervisors to implementation in the classroom. In 1986 a new director of education introduced the Halton Effective Schools Project "to enhance the quality of the system and the schools' performance through the application of the principles of effective schools" (p14). A task force of board office personnel,

principals, innovative systems leaders, and an effectiveness researcher developed four guiding principles. They were:

1. Each school through a cooperative approach could choose to buy into the project or to continue with the status quo;
2. Top-down, bottom-up approach was used in that the system provided the direction, and supported the schools own implementation plans;
3. The project was integrated with existing supervision, managerial, and planning systems;
4. A five year plus time frame was adopted which recognized that change was a process, not an event.

The task force also developed a model, containing twelve characteristics, which fell into these three broad categories:

1. A common mission - a shared and communicated vision of school goals and priorities.

The principal played a major role in the encouragement of teachers', parents', and students' involvement in, commitment to, and responsibility for the vision;

2. An emphasis on learning - high expectations, and development of curriculum.

Materials were linked to school goals;

3. A climate conducive to learning - fairness, consistency, recognition, and incentives, in an attractive, comfortable environment, inviting to stakeholders.

This change was initiated by asking four questions, corresponding to four stages of development:

1. Where are we now (assessment)?
2. Where would we like to be in the future (planning)?

3. How best could we move in that direction (implementation)?
4. How would we evaluate the changes we were making (evaluation) (p. 17)?

Those schools that paid attention to development of shared values, ensured a change climate, and valued collaborative culture throughout the growth planning process created a supportive framework for change. Schools assessed their need for change through the use of a series of effective schools questionnaires for teachers, parents, and students . Appendix A (Halton Board of Education, 1992) contains the questionnaire given to secondary school students. A close examination revealed examples of orientation to old paradigm academic effectiveness with, for example, references to higher priority placed on academic achievement than development of other intelligences (reflected in order of choices given in # 6), a segregated, pre-defined curriculum (#'s 16, 27), learning in a predefined context (#'s 33, 34, 57, 60), an implication of comparative grading (#'s 19, 20), teacher as dispenser of knowledge (#'s 9, 10), higher appreciation of written or 'paper and ink' work ( example preceding # 9, # 56)

These baseline developing data resulted in improvements that were focused on non-classroom areas, and thus had little real impact on students, never really challenging the traditional approaches to teaching and learning. It was felt that school effectiveness and school improvement would have to address "fairly radical changes in the design and unfolding of learning experiences" (p.99). Eventually Halton began to use a different conceptual framework of classroom instruction with four interconnected cogs:

1. instructional skills like time on task;
2. instructional strategies like co-operative group learning;
3. classroom management;

#### 4. curriculum.

##### Vision and New Paradigm Effectiveness

Combs (1981) listed as hallmarks of the future the certainties of the information explosion, the increasing pace of change, the primacy of social problems, and the increasing importance of personal fulfilment. Schools concerned with meeting the demands of new paradigm effectiveness would focus their efforts on social interactions and responsibility, problem solving skills, teaching of skills that would assist people in understanding themselves and others, and stress values needed by people who live in cooperative, interdependent society. The curriculum would be personal, individualized, life-long, and based on humanistic psychology. An accurate vision of the future was critical to success of the education system. If that view was inaccurate, then the education system would betray its youth.

Hunter (1987) spoke of four trends that indicated the future direction of the impact of education on the self-awareness of individuals. Knowledge of self, television as a literacy tool, aesthetics as a self-actualizer and leisure stimulant, and the growth of technology as an extension of the individual's hand and mind all centered on the central theme of the increasing value of self-fulfilment. Learning how to learn replaced the value of individual knowledge possession, and it was in this context that schools could best prepare for the third wave society of synthesis.

Gardner's (2000) vision for education in the new century was inclusive, culturally sensitive, and led to a new paradigm of effectiveness. It stipulated that educators and students must act individually and synergistically on their views of truth (and falseness) ,

beauty (and ugliness), and goodness (and evil), to develop an understanding of the constants and the changes in the world. Visions of schools would vary depending on history, locale, curricular needs and desires, available resources, and cultural and individual goals. A clear vision was one of the prerequisites of an effective education.

In order to accomplish an effective education, educators must gain a respect for the various approaches that individuals can take into subject matter of the disciplines, and seek to engage all students through their use of their intelligences, be they linguistic, musical, logical-mathematical, spatial, bodily-kinesthetic, or of a personal nature. Through the three recurring examples of the theory of evolution as a reflection of what was true, Mozart's "The Marriage of Figaro" for beauty, and a study of the Holocaust in a search for examples of goodness and morality in humanity, the potential of this vision was examined and compared to alternatives such as Hirsch's fixed and age-coordinated curriculum, and the pedagogy of the traditional International Baccalaureate program.

Effective schools fostered understanding of the world to create human beings who were ardently working to make it a better place. This understanding must be focused within the boundaries of what was true, beautiful, and good, with twin anchors of knowledge about the human condition, and knowledge about the present and coming pressures, challenges, and opportunities. This effectiveness reached outside the cognitive and specific discipline realms and involved motivation, emotions, social and moral practices, and values. It's development was based on studies of the mind (psychology), brain (neurology and biology), and cultures (anthropology). The scope of the education was the subject of constant negotiation and reconsideration. Educators faced the task of recognizing the difficulties that students encountered in attaining genuine understanding

of important topics and concepts, and of recognizing the differences among minds. in order to fashion an education that reached an infinite variety of students. Gardner's (1985) theory of multiple intelligences was relevant to effectiveness as it provided powerful points of entry to individual topics, through the use of apt analogies, and multiple representations of the central or core ideas of a topic.

Into these considerations of effectiveness, Gardner introduced an examination of the constants currently within the school setting: a notational system, a body of lore, and formal academic disciplines, each reflecting the culture's procedures for confronting the physical, biological and personal worlds. The decontextualized school settings was devised for the acquisition of literacy and mastery of disciplines, within an enlightenment and post-enlightenment thinking framework that has fostered a separate realm of reason, science, knowledge and truth, while minimizing aesthetics and morality as emotional and subjective. This separation of the true from the beautiful and the good was a contrasting view to that of the historical Greek position or the Confucian fusion of these virtues. Classical cultures viewed the acquisition of knowledge and skill as necessary for the attainment of moral virtue in the service of one's society.

The separation of the true from the beautiful and the good resonated in the universalist position of many psychologists and biologists, which held that deep down, people were alike in the important aspects. This held up for positions that were 'hard-wired', those that were reflected in the foundational layers of Maslow's (1973) hierarchy of needs, but broke down when one considered the individual idiosyncrasies apparent in use of language and communication or how one interacts with another human, for instance. From this position grew the basis of the valuing of certain intelligences that

sought to develop the utilitarian aspects of education, the training for the workforce, as opposed to the development of understanding through the fostering of varied intelligences

In illustrating how schools could implement their visions, listed were a number of choices that indicated how opinions could oscillate between the polarities of serving vested interests or of developing understanding in each student based on their intellectual orientation:

- Between breadth and depth - pursuit of a quantity of core knowledge versus exploration of fewer topics at a far greater depth;
- Between accumulation or construction of knowledge;
- Between utilitarian outcomes and intellectual growth;
- Between uniform and individualized growth;
- Between privately and publicly sponsored education;
- Between blended or separate disciplines;
- Between assessment that was minimized or critiqued and evaluation that was maximized and assessed;
- Between local culturally based standards and universal standards;
- Between showcased technology and highlighted human dimension.

High literacy, flexibility, capacity to trouble shoot, problem-finding ability, ability to determine what was worth knowing, ability to synthesize exponentially expanding domains of knowledge to useful form, and ability to shift roles and vocations were outcomes of effective schools in a fast-changing world. Developers of school visions needed to be aware of the changes occurring in cultures if true effectiveness was to be achieved.

Key components of an effective vision for today would take into account a need for problem-solving, metacognition, familiarity with the changing workplace, and mastery of specific intelligences. The best education must synthesize the latest insights about psychology, neurology, biology, and anthropology with time-honoured lore, in order to serve individuals by preparing them with understanding for the world as it is and as it will be, as opposed to pandering to those who want to serve the institutions of the twentieth century. Regrettably, the practice of schooling meant that most individuals were being trained as apprentices for careers that they would never follow.

A case in point of a vision of education that provided a foundation for understanding was the Italian Reggio Emilia preschools. Illustrations were given of the quality, variety, depth and availability of topics and relationships that allowed for the foundation of truth, beauty, and goodness to be laid in a culture influenced by teachers, parents, physical setting, region, and the growing children over several decades. Further examples of effectiveness at various levels of school life included the American Spectrum schools, where in one year of preschool, children were observed as they interacted with a richly stocked supply of materials and engaged in the stimulation of as many intelligences as possible, either through their own initiative or by being bridged into activities by staff. At the end of the year their parents were given a document that described a child's strengths and weaknesses, with suggested activities to be undertaken to encourage personal development along various paths. Other examples were given that provided an analysis of the traditional job-preparation education with traditional curricula and rigorous standards, such as the International Baccalaureate. Whereas the preschool and primary education was most concerned with the development of the intelligences of the



child, secondary schools seemed much more bent on development of skills needed by the industrial machine, instead of what was offered in the rich package of innate student intelligences.

#### A Less Structured View To Effectiveness

Wheatley's (1994) exploration into the realm of chaos as an alternate view of the order or seeming lack thereof that existed in structures of nature, and that were paralleled in organizations, suggested that when a system was dislodged from its stable state, that it oscillated back and forth between different states. These wanderings, impacted by some perhaps unrecognized limits, tendencies or boundaries or 'strange attractors', converged into previously unrecognized patterns. The emerging shapes were referred to as the shapes of wholeness, which was analogous to being able to view the shape of wholeness of an organization without having to remain centered on the old focus of discrete tasks.

In the same way, if the effective educational organization leader recognized the simple governing principles, guiding visions, strong values, organizational beliefs, and the tendencies of the organization, and communicated these, and allowed the individuals in the system their seeming random, sometimes chaotic meanderings, then the dominant shape of the organization, reflecting a clarity about the purpose and the direction of the organization, would emerge. This was reflective of top-down, bottom-up management style, which allowed the general themes of the organization to be developed by a leader sensitive of the culture, purpose and direction of the system while allowing for the creativity and imagination of the individuals within the system.

What leaders were called upon to do in a chaotic world was to shape their organizations through concepts, not through elaborate rules or structures. This was vision

casting that was inclusive and practical, but open-ended and responsive of the desired outcomes of the students, as opposed to the hierarchy. This type of self-organizing system had the freedom to grow and evolve, guided by the rule of consistency with itself and its past. The resulting creativity within boundaries, the chaos around strange attractors, built an effectiveness that was reflective of the indisputable realities of the current world and the immutable potential of its youth.

## B. Research Question and Hypothesis

Based on the literature review and the discussion of its educational relevance, the research question is:

Is there a statistically significant relationship between school effectiveness as measured by A School for the Eighties and Nineties: A Priorities Search, and the use of visioning strategy as measured by Measure of Characteristics Present in the Formulation and Implementation of Visioning Strategy? \_

The Hypothesis is:

School effectiveness as measured by A School for the Eighties and Nineties: A Priorities Search is affected in a positive direction through the use of visioning strategy as measured by Measure of Characteristics Present in the Formulation and Implementation of Visioning Strategy.

## CHAPTER III

### METHODOLOGY

#### A. Subjects

The subjects of this study were drawn from the secondary schools of the 11 of 24 school boards who responded to the initial request to participate in this research, as well as from the private secondary schools operating in the same geographical area of southwestern Ontario (see Appendix J). From this group, which comprised 112 high schools, 13 Catholic schools, 9 Private schools, and 11 Public schools responded, for a total of 33 schools.

The principals of each of the 33 schools that consented to participate became the sample from which data concerning visioning strategy was drawn. One OAC class from each school, for a total of 33 classes and 638 OAC students, became the sample from which school effectiveness data was gathered. Because the schools that responded could be identified as either Catholic, Private, or Public, this sample could be further divided into independent samples in order to allow a search for differences among the groups of schools.

## B. Instrumentation

The study attempted to determine if there was a meaningful relationship between the key input factor of visioning strategy and the ultimate outcome of new paradigm effectiveness. In order to do this two instruments were used to gather data. The “Measure of Characteristics Present in the Formulation and Implementation of Visioning Strategy (MCP-FIV)”, an instrument developed by this researcher, provided data from principals concerning the presence and quality of vision and whether the schools led by those principals operationalized vision through a clearly defined visioning strategy (see Appendix B). Each section of the instrument measures a specific element of visioning strategy as a change process as detailed by Sheetz and Benson (1994), Dlugosh, Norton, Sybouts, and Webb (1996), and Lieberman (1995), as well as reflecting personal experience of the researcher in facilitation and implementation of a visioning strategy. Table B specifies the sections of the instrument, and the specific elements of each.

Table B

### Item Summary for MCP-FIV

Section 1 - Identification	Section 2 - Formulation	Section 3 - Implementation	Section 4 - Feedback / Assessment
- Grouping Information	2. Stakeholder involvement	4. Strategic plan use	6. Implementation Percentage
1. Vision Involvement	3.Process Discussion	5. Strategic Plan Characteristics	7. Sources of Feedback

The second instrument, “A School for the Eighties and Nineties: A Priorities Search” (see Appendix C) was constructed for and used by the Colorado Department of Education to assist in their move toward new paradigm effective schools. Through it, high school students in their graduating year were asked to indicate on a scale of 0 (Disagree - not a characteristic of our school) to 3 (Agree strongly) the extent to which they believed that the item described their school. The specific items on the instrument correlate closely with the indicators of new paradigm school effectiveness as put forward by many educational theorists, and allowed a measuring of the responses of students in relation to the presence in their schools of this particular set of school effectiveness criteria. The futuristic threads that emerged from the literature and that form a basis for the items are:

- Education must focus on outcomes;
- The process of education must become individualized;
- The process of education must also include group learning experiences;
- The outcomes of individualization must focus upon self-knowledge and learning how to learn;
- The outcomes of group learning must focus upon skills for social interaction and increasing responsibility for one’s own development;
- To obtain the above processes and outcomes, the teacher must become a learning facilitator.
- the facilitation role for teachers requires a wider involvement of the whole school and the whole community as learning resources and as supports for learning;

- The school and community must become one great learning community that provides students with the opportunity to learn the nature of work, to cultivate self-interests, and thereby empower young people to set their own course based on their own inner resources

The instrument A School for the Eighties and Nineties: A Priorities Search has been validated by a cluster of 35 educators who have a significant knowledge of studies of education and the future. Each item in the instrument represents the views of these scholars and researchers and purposefully avoids the encroachment of the compilers' views. Assistance to this cluster and its consultants which conducted the research for the instrument came from University of Denver's Bureau of Educational Research, The Mid-Continent Educational Laboratory, Learning Trends (The Naisbitt Group), The Colorado Department of Education, and the Frost Foundation.

The instrument was modified in the following two ways: (1) a second scale for each item asking students to indicate the extent to which they feel this item should be a characteristic of their school was removed from the instrument as it was not relevant to the purposes of this investigation at this time; (2) the instrument was only administered to one segment of school stakeholders, students, instead of several groups as is indicated in the documentation accompanying this instrument.

The instrument is divided into three sections. and each of the items, as summarized in Table C below, relates directly to at least one item in the foregoing list.

Table C

Item Summary for A School for the Eighties and Nineties: A Priorities Search

<b>Section 1</b>	<b>Section 2</b>	<b>Section 3</b>
1. Community-Based Learning	9. Personalized Education Plan	19. Literacy, Math, and Science
2. School as Learning Community	10 Individualized Performance Expectations	20. Instructional Coordination
3. Life-Long Learning	11. Outcome-Bassed Education	21. Social Studies
4. Personal Responsibility	12. Access To Learning Opportunities	22. Second Language
5. Social and Political Responsibility	13. Cooperation	23. Technology
6. Significant Dialogue	14. Mastery of the Learning Process	24. Fine Arts and Humanities
7. Planned Change	15. Self-Directed Learning	25. Self-Understanding and Skills for Living
8. Supportive Climate	16. Intellectual Skills	26. Interdisciplinary Learning
	17. Adaptibility	27. Varied Learning Environments
	18. Teacher as Facilitator-Coordinator	



### C. Procedures

The MCP-FIV instrument was mailed to all secondary school principals from 11 Public and Catholic school boards in south-western Ontario, after permission to proceed had been obtained from the Ethics Committee of the Faculty of Education, University of Windsor, and the school boards. (see Appendixes D, E, F, G, H, I, and J) This instrument was also mailed to all Private secondary school principals in the geographic area covered by the Public and Catholic school boards. All principals were asked to complete a six page questionnaire concerning the presence, formulation and implementation of a visioning strategy at their school or board. This instrument was to be returned to the researcher upon completion.

Concurrently, there was also distribution to these principals of a school effectiveness questionnaire, which they were asked to give to a teacher to distribute to one class of OAC students. In order to create conditions that were consistent across the study, the students were asked to follow specific instructions for completing the questionnaire, as described to the teacher in the cover material (see Appendix I). These questionnaires were collected and returned to the principal by the administering teacher, who in turn returned them, along with the principal's questionnaire, to the researcher in the envelope provided. Upon receipt of this data, the researcher conducted the appropriate statistical analysis and drew conclusions that reflect upon the hypothesis.

An initial pre-approach letter was also sent to each principal of the consenting boards approximately 4 days before the instrument mailing, alerting them that a research request was forthcoming. An attempt was made to speak with each principal by phone

within 2 weeks of the instrument mailing, and each principal or school secretary spoken with was asked if the package had been received, and whether it would be completed. If there was hesitancy, then the researcher briefly restated the request concerning the two instruments, and asked that the principal reconsider his or her participation. Three schools requested re-mailings because of misplacement or non-receipt of the package.

#### D. Limitations of the Design

The subjects for this study were self-selecting within the geographical and educational parameters established at the outset by the researcher. This may have given rise to the following threats to validity.

It is likely that some of the non-respondents to the instruments, at both the board level and the school level, chose not to participate because of either an antipathy toward the concept of visioning strategy or of attempting to measure new paradigm school effectiveness, or because of apprehension that disclosure of the relevant data would in some way reflect badly on the board, the school, or the individuals responsible for the particular jurisdiction. This may have given an overall boost to the scores relating to both of the items being examined

School principals may have manipulated the school effectiveness data by selecting from within their school a particular group of students that they felt were more likely to view the school positively on the criteria being examined.

While the researcher has provided definitions of visioning strategy and effectiveness, it is admittedly difficult to fix beyond the theory and practice of those

participating in leading edge research what new definitions school effectiveness will attract in the new century. Thus while the researcher will draw conclusions about visioning strategy and effectiveness, these must be viewed in the current temporal context, and not generalized as a static definition for the new century.

There is also a concern that a somewhat negative climate created by current labour unrest, re-packaging of the high school curriculum, and general antipathy between school personnel and the Ontario Ministry of Education may have depressed the fulfilment of school visions. The generalizability of this study is limited to the extent that these factors are unique to Ontario.

## CHAPTER IV

### ANALYSIS OF THE DATA

Data was collected from two samples for this research. The first was the selected OAC students in the 33 schools that responded and provided data for the continuous variable of school effectiveness. Because of its stratification into three sub-groups based on board type, it was possible to divide this sample into three independent samples in order to explore the emerging question related to this variable of whether there was any difference among school effectiveness scores by board type. The data pertained to the intrarelation as well as the interrelation of the variables, allowing conclusions to be drawn from the data which related generally to the research question as well as the question of differences within the samples.

The second sample was the principals in the schools that responded. This sample provided data for the variable of visioning strategy. This variable was considered a continuous variable for the correlation coefficient test, and a nominal variable ( $vs=0$ ,  $vs\neq 0$ ) when dividing the effectiveness scores into two groups in order to perform the appropriate t-test.

The data could be classified into three categories by source. Ontario legislation produces two types of boards based on religious alignment - Public School boards and

Separate School boards (Catholic), both of which receive public funding. A third type of school board exists when one looks outside the umbrella of provincial funding. These Private boards operate schools without the benefit of provincial funding. Some statistically significant results arose from an examination of the impact of these variables on the schools when grouped by board type.

Of the 24 southwestern Ontario school boards that were requested to participate in this study, 11 returned letters of permission allowing the researcher to proceed in contacting the principals of their secondary schools. This group comprised 77 schools, and 24 of these schools participated in the study for a participation rate of 31.2%. There were also requests to participate sent to the 35 private secondary schools that were listed by the Ministry of Education as offering OAC, in the same geographic region. Of these, nine participated, for a participation rate of 25.7%. This gave an overall participation of 33 schools out of 112 contacted, for a total of 29.5%, creating sample sizes of 638 OAC students and 33 principals. A research package containing the appropriate cover letters, instructions, instruments, and return envelope was sent to each of these schools.

The data collected from the 27-item A School for the Eighties and Nineties: A Priorities Search measured student perception at the high-school graduation level of the new paradigm effectiveness of their school. The items included in the instrument were divided into three sections that focused on The Learning Community, The Learning Process, and The Learning Program, and were rated on a Likert-type scale from 0 - Disagree (not a characteristic of our school) to 3 - Agree Strongly. As a reliability analysis for this effectiveness scale, Chronbach's Alpha (see Appendix K) of .8601 was determined. Table D shows the results of this test.

Table D

Reliability Analysis for A School for the Eighties and Nineties: A Priorities Search

Mean	Variance	Std Dev	N of Variables	N of cases	Alpha
45.0126	114.8709	10.7178	27	637	.8601

The principal of each school that responded also completed the Measure of Characteristics Present in the Formulation and Implementation of Visioning Strategy (MCP-FIV). This instrument asked principals to describe their participation, if any, in the process of vision formulation and implementation through 33 questions and selections.

There were four statistical tests or groups of tests performed on the data that was received from the instruments, using the Statistical Package for Social Sciences, Version 10.0 (SPSS Corporation, 2000). Table E at the end of this chapter summarizes the statistical results from each test.

1. The first statistical test was the t-test for two independent samples, for which the school sample was divided into two groups that indicated the level of involvement in a visioning strategy for each school - those that had scores other than 0 ( $vs \neq 0$ ) and those that had scores of 0 and where the principal had been at the school for at least two years ( $vs = 0$ ,  $p > 2$ ). This test was used to measure the existence of any statistical difference for the variable of school effectiveness between schools with and without visioning strategies (see Appendix L for school effectiveness scores relative frequency table). By considering schools where the principal had been in place for more than two years for  $vs = 0$ , we eliminated from the sample for this test those

schools that may have had visioning strategies in place but where the current principal had not been involved. It would not have been accurate to include in the same group schools that truly had no visioning strategy activity in the past two years and those schools that may have but the principal gave the school a vs score of zero because of lack of personal involvement.

Of these two groups, there were 17 schools with  $vs \neq 0$ , and 10 schools with  $vs = 0$ ,  $p > .2$ . Both of these samples were measured for school effectiveness on an interval level scale in order to determine whether there was a statistically significant difference between the two samples. The t-test for two independent samples (see Appendix M) showed that there was no statistically significant difference between the two samples in relation to the variable of school effectiveness. Whether the school did or did not have a Visioning Strategy did not affect the school effectiveness outcome as measured by the selected instrument. The data as tested showed that the null hypothesis ( $H_0: \mu_1 = \mu_2$ ) is not rejected ( $t_{24} = .591$ ,  $p > .05$ ).

2. The second statistical test performed on this data measured whether there was a statistically significant correlation between the two variables of school effectiveness and visioning strategy (see Appendix N for visioning strategy scores relative frequency table), as measured by the selected instruments for the sample of 33 secondary schools. The test used was the Test for Product-Moment (Pearson) Correlation Coefficient  $r$  (see Appendix O) which required one sample and two variables measured on an interval level scale.  $H_0: r = 0$  is accepted ( $r = .048$ ,  $P > .05$ ).

There was no statistically significant correlation between school effectiveness and visioning strategy.

3. The third statistical treatment was completed to test the emerging question of whether there was a difference in school effectiveness based on board type.

A. A Oneway ANOVA (see Appendix P) for the three independent samples of Catholic schools, Private schools, and Public schools revealed a significant difference for the continuous variable of school effectiveness at the .05 level of significance ( $F_{(2,30)}=4.865$ ,  $p<.05$ ). This led to a rejection of the  $H_0$ , and therefore an acceptance of  $H_1$ , indicating that there was a difference in school effectiveness among the board types.

- B. Post Hoc Tests (Scheffe) (see Appendix P) were performed to determine in which pairings of school board types the significant differences occurred.

I.  $H_0$  was accepted for the Catholic/Public pairing ( $P=.949>.05$ ), indicating that there was no significant difference between schools of these board types for the variable of school effectiveness. The means / standard deviations, respectively, were 44.3825 / 2.8045 and 43.7523 / 5.6623.

II.  $H_0$  was rejected and  $H_1$  was accepted for the Private/Catholic pairing ( $P=.042<.05$ ) indicating that there was a significant difference between schools of these board types. The means / standard deviations of 49.8590 / 5.7351 for schools of Private boards and 44.3825 / 2.8045 for schools of Catholic boards indicate that Schools of Private boards score significantly higher for the school effectiveness variable than Schools of Catholic boards.



### III. $H_0$ was rejected and $H_1$ was accepted for the Private/Public pairing

( $P=.027<.05$ ) indicating that there was a significant difference between schools of these board types. The means / standard deviationsof 49.8590 / 5.7351 for schools of Private boards and 43.7523 / 5.6623 for schools of Public boards indicate that Schools of Private boards score significantly higher for the school effectiveness variable than Schools of Public boards.

4. Based on the statistically significant difference for school effectiveness scores between the schools of Private boards and those of the Public and Catholic boards, a fourth set of statistical tests was performed to reveal if these differences were based on a broad range of factors represented in the school effectiveness instrument.

A. The school effectiveness instrument is divided into three sections: I. The Learning Community; II. The Learning Process; and III. The Learning Program. These sections (EFFSECT1, EFFSECT2, and EFFSECT3) were used as the dependent variables and Board Type as the factor in these Oneway ANOVA tests (see Appendix Q).

A significant difference at the .05 level of significance occurred for EFFSECT1 ( $F_{(2,30)}=6.897$ ,  $p<.05$ ) and EFFSECT3 ( $F_{(2,30)}=3.875$ ,  $p<.05$ ). For EFFSECT2, no significant difference was detected ( $F_{(2,30)}=3.018$ ,  $p>.05$ ), although it is noted that the significance of the F test was .064. Therefore,  $H_0$  was rejected and  $H_1$  accepted for EFFSECT1 and EFFSECT3, indicating that there was a significant difference in school effectiveness based on these sections among the board types.  $H_0$  was not rejected for EFFSECT2, indicating no significant difference for this section.

B. Post Hoc Tests (Scheffe) were performed (see Appendix Q) to determine the significance of the differences between the board types for each section of the school effectiveness instrument. The P values resulting from the tests that include schools of Private boards are .023, .005 .106 .116 .069, and .058. The P values resulting from the tests that include only schools of Catholic and Public boards are .733, .999, and .982, indicating that the difference in school effectiveness scores between publicly funded and privately funded schools is not based on a narrow section of responses given in the instrument.

Table E

Summary of Data for Statistical Tests

Test #	Test Type	Sample Size	Mean	Std Dev	Random Variable Value	Significance (2-tailed)
1	t-test for independent samples	17, 10	46.1192	6.7033	t=.624	.538
2	Pearson Correlation Coefficient r	33			r=.048	.795
3A	Oneway ANOVA	33	45.6660.	5.2976	F=4.865	.015
3B I	Post Hoc (Scheffe)	13, 11	Mean Diff .6302			.949
3B II	Post Hoc (Scheffe)	9, 13	Mean Diff 5.4765			.042
3B III	Post Hoc (Scheffe)	9, 11	Mean Diff 6.1057			.027
4A	Oneway ANOVA	33	EFFSECT1 13.0818 EFFSECT2 17.4751 EFFSECT3 15.1097	1.6563 1.9149 2.0361	F=6.897 F=3.018 F=3.875	.003 .064 .032
4B	Post Hoc (Scheffe)	33				See Appendix Q

## CHAPTER V

### DISCUSSION

The hypothesis upon which this research is constructed provided a framework within which one could envision the orderly placement of effects after treatment. What could be challenging about hypothesizing that a higher score on the visioning strategy scale would result in, or at least correlate with, a higher school effectiveness score? Certainly if school leadership wanted to enjoy a more successful outcome to the school endeavour, then the charismatic, vision-building, transformational, or any other type of leader could logically expect that a good plan that involved the views of many, that was well researched, that had an implementation timeline, and that evaluated results would be a step in the right direction. It seems intuitive that the effort expended in such a venture would result in measurable improvements in school effectiveness.

How then does one explain the lack of support for the hypothesis on which these ideas rest? The statistical results bear out that there was no significant correlation between the variables of visioning strategy score and school effectiveness score. The higher visioning strategy scores did not necessarily correlate with higher school effectiveness scores. Neither was there a difference between schools that did and did not have visioning strategy, as measured by  $vs=0$  and  $vs\neq 0$ , even when adjusted to remove

from the sample those principals whose tenure in a given school with no reported visioning strategy was less than two years.

In order to grasp the significance of the results of the statistical tests that have been performed on the data collected from the schools, it is necessary to reconsider the broad approach to school effectiveness that has been examined throughout this document. When one considers school effectiveness, the industrial paradigm imposes a traditional conception of academic achievement in the realm of logical-mathematical and linguistic intelligences, as measured by decontextualized standardized tests in a knowledge-accumulation, answer-orientated system, such as is evidenced in “Learning for Life” (Ontario Ministry of Education and Ministry of Training, 2000). This type of mandate appears to be one of the factors that acted as a strong deterrent to developing or implementing a vision whose impact could be measured through the use of an instrument such as A School for the Eighties and Nineties. This is illustrated by the acceptance of the null hypothesis for the first two statistical tests, which demonstrated that the input of visioning strategy made no statistically significant impact on the outcome of school effectiveness as measured by graduating students.

If it had been from the industrial paradigm perspective that school effectiveness was measured in relation to the plans laid by the schooling system, their visioning strategy, it would have been surprising, if not incredible, that the statistical analysis did not reveal a statistical difference between those schools with operationalized visions and those without. Further, the more inclusive and operationalized they were (the higher their score), the more effective the school would have been expected to be, with a resulting statistically significant positive correlation between the two variables. In fact, it is likely

that the validity of the instruments would have been brought into question in relation to their ability to measure these two ‘apple pie’ variables for any school adhering to the academic output mentality if a strong correlation were not demonstrated.

The results of this study, however, do not represent conclusions that can be drawn from, supported by, or generalized onto this industrial paradigm platform. It is only as one considers the pervasive stress on standardization, centralization, and output orientation of schooling in this provincial jurisdiction at this time that one can begin to understand the counter-intuitive nature of finding a correlation between these two variables within the sample.

More specifically, the school effectiveness instrument measured student reaction to how their school performed in three specific areas: the learning community, the learning process, and the learning program. These areas correlate heavily with the new paradigm skills and learning modalities that have been surfaced by Toffler, Reich, Gardner, Stoll and Fink, Daniels and others. They do not correlate with the industrial paradigm agenda which values knowledge accumulation, unidimensional intelligence, and single entry point pedagogy. The statistically insignificant difference between those schools with and without a visioning strategy, and a lack of any significant correlation coefficient as the visioning strategy score increased in those cases where presence of visioning strategy was reported is symptomatic. It appears appropriate to conclude that while approximately 50% of the schools reported expending effort in the area of visioning strategy in the past two years, that these schools’ efforts made no difference in increasing student perceptions of the effectiveness of their schools from a new paradigm perspective. Further, because the schools’ efforts in the area of visioning strategy did not

create any statistically significant difference from those schools that reported spending no effort on visioning strategy, we can conclude that students feel that the efforts of stakeholders in the area of visioning strategy is non-impacting in relation to preparing them with the new paradigm skills for the new century, a necessity propounded by many researchers, theorists, and educators as illustrated in the Review of Literature section of this document.

Is this significant? There are two key points to consider here. Firstly, it appears appropriate to proceed one step further and conclude that, as far as the school effectiveness instrument is able to discern, because none of the school groups scored particularly well on the instrument, with the privately funded schools highest at 61.56%, and the overall average being 56.38%, and because the literature speaks of no other major paradigm of education, it is likely that the majority of schools are, alternatively, industrial paradigm schools. Such schools are by definition structured and operated for the benefit of the industrial era system, and for those whose interests are embedded, or vested, in that system. Further, if students are not being educated in a multi-intelligence, new paradigm skills approach to the realities of the present and future, it is reasonable to conclude that these students are being processed in the industrial 'schooling' tradition. To the extent that these students are representative of their school, board, regional or provincial characteristics of other OAC students, and then other high school students in the same progression, and to the extent that these sample schools represent board, region and provincial characteristics, we can generalize this conclusion beyond the sample. We must at least consider the suggestion that to some degree, Ontario high school students are

being schooled in the industrial paradigm tradition in order to meet the needs of the system it serves, rather than favouring the needs and potential of the students themselves.

Secondly, questions of value and sound footing for change arise. Does it matter that these schools, either the sample or those generalized upon, are cast as old paradigm institutions? Is there any imminent impact upon students that will affect their ability to function maximally in their world? The patterns, significances and conclusions arrived at in this research are based upon the theories of many futurists, but there appears not to be an overwhelming amount of empirical research available on which one can actually determine norms for labelling schools based on their paradigm orientation. While an overall rating of 56.38% appears to be low for new paradigm orientation, there is no baseline available to which it can be compared. Can a research instrument be developed that will provide a baseline for determining which paradigm a school or system favours? Can a significant data-base be compiled on which schools can be normed? Further, is there evidence available to support claims that new paradigm skills and diverse intelligence development are actually valued in the present. Reich (1991), Toffler (1980), and The Conference Board of Canada (1992), for instance, are specific in stating where these skills are required and valued, but appear not to support these claims with research data from Human Resources aggregates. There needs to be a body of research to support Howard's (1986) and Toffler's (1980) claims of personal fulfilment superceding paycheque in the new wave mentality. Only with the firm foundation of current relevant empirical data will there be any significant change from the current approach of viewing students as output of schools to meet the needs of society. This data will support a view of education as meeting the needs of students in order to shape society.

Despite the fact that none of the school systems appeared to do particularly well on the school effectiveness instrument, there was a significant difference between the schools of the Private boards and those of either the Catholic or Public boards. The corroborating evidence of the improved effectiveness of a school 'system' not directly under the provincial mandate is available to contrast to a system that is mandated by a directive-style provincial Ministry of Education. The third set of statistical tests identifies the statistically significant difference between these two types of schools. This difference becomes more interesting when we consider the lack of any significant correlation coefficient between the two variables of school effectiveness and visioning strategy. In fact, the Private schools received higher effectiveness scores but the statistical tests have discounted visioning strategy as a significant cause for this.

The two groups of publicly funded schools (Catholic and Public) are not significantly different from each other (see Appendix P), so they are here considered as one group. There are several primary differences between the privately and publicly funded schools. Private schools are smaller, tend to have higher parent participation rates, identify more closely with the culture and values of an identifiable community, are staffed by individuals who are seen as participants in and supporters of these values, are governed by a board whose mandate is to provide an alternative approach to education, are funded primarily by tuition payments (which creates a need for a very direct responsiveness to the school's constituency), can choose alternative curriculum materials, and generally operate in a much less centralized and standardized manner.

The nature of the MCP-FIV is generic in its attempt to gather information about the characteristics of the school vision, giving the higher score to one that is inclusive and



followed up with a specific implementation plan. It does not concern itself with the substance, or values espoused in the vision, but instead focuses on the structure of the whole process. It is a measure of the traditional literature-based visioning strategy that focuses on the system. It therefore was designed to indicate the presence of a process, not to evaluate the value of the vision itself.

If there is no significant impact of visioning strategy on school effectiveness scores as measured by MCP-FIV, but yet there is a group of schools that are identifiably different from the norm for this study, then perhaps consideration ought to be given to extending industrial paradigm awareness as a means of evaluating the basis on which a visioning strategy is built, and the orientation it can cast over a school. Howard's (1986) alternative approach to vision for schools did introduce a particular value into the visioning process, that of recognizing and nurturing the needs of the individual, and building a visioning framework that centered on the student, not on the system. As detailed in the Literature Review, Howard reported on the characteristics of visioning strategies that would serve the needs of students as opposed to the needs of the industrial paradigm. Value was placed on highlighting the competencies that children would need in the emerging society in order to be successful, happy, and contributing, and then on what schools should be like in order to nurture these competencies.

On this point the question remains regarding the likelihood of that kind of vision existing in the significantly different group of schools as measured by an instrument with this orientation. Is it possible that by their very nature and *raison d'être*, the significantly different group of schools live within a visioning strategy that is so pervasive that it is impossible to quantify in an instrument such as a traditional literature-based MCP-FIV,

that does not take into account their different orientation and values? If this is the case, then the challenge exists to identify an instrument or format, founded on theories and data of the proponents of new paradigm effectiveness, that is broad enough in its scope to capture the essence of true visioning strategy and which allows a reflection of the essence of educational effectiveness, that of true student success, not system justification.

In summary, the research indicates that there is no difference between schools with and without a visioning strategy in relation to new paradigm effectiveness. The visioning strategy efforts of school leaders are ineffective, from graduation students perspective, in light of the personal development and capacity required for this century. The noted difference between school groups may indicate that provincial fixation on centralization and standardization brings the focus exclusively to the system and its alignment with the industrial paradigm output mentality, while the group of schools not bound as strictly by such a mandate, and which are more reflective of the culture of their supporting community, may be operating de facto under a new paradigm visioning strategy that expresses the particular value of student, not system, orientation.

## CHAPTER VI

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## VII. APPENDIXES



## **Effective Schools Secondary (Gr. 9 - OAC) Student Questionnaire**

### **Notes for Questionnaire Administrators**

- Please assure the students of confidentiality
- Question 3 - Academic courses = math, language arts, science and social science (4 subjects). If 2 courses at each level response is 'mixed'.
- Go through instructions for questions 9 to 61.
- Please be available to give help with reading, and keep a note of any particularly difficult items.

**Thank you**



# THE HALTON BOARD OF EDUCATION

## EFFECTIVE SCHOOLS SECONDARY (GR. 9 - OAC) STUDENT QUESTIONNAIRE

In effective schools, students do well in their courses and feel good about themselves. This survey has been designed to help your school obtain information about how you feel about school. The information will be used in an effort to improve the quality of education in your school.

### BACKGROUND

Before you start, please answer the following questions, putting an 'X' in the appropriate box to complete the sentence.

1. I am currently in my:
 

1st year of high school	<input type="checkbox"/>
2nd year of high school	<input type="checkbox"/>
3rd year of high school	<input type="checkbox"/>
4th year of high school	<input type="checkbox"/>
5th year of high school	<input type="checkbox"/>
6th year of high school	<input type="checkbox"/>
  
2. I started at this school in:
 

1991	<input type="checkbox"/>
1990	<input type="checkbox"/>
1989	<input type="checkbox"/>
1988	<input type="checkbox"/>
1987	<input type="checkbox"/>
1986	<input type="checkbox"/>

3. Most of my academic courses are at the:
- General Level ☐
  - Advanced Level ☐
  - Basic Level ☐
  - Mixed General and Advanced Level ☐
  - Mixed General and Basic Level ☐
4. I am:
- Female ☐
  - Male ☐
5. I am enrolled in the Extended French Immersion Program?  
(I began in Grade 7)
- Yes ☐
  - No ☐
5. I am in the Immersion French Program?  
(I began in Grade 1)
- Yes ☐
  - No ☐
6. After I leave high school I hope to:
- Find a job ☐
  - Start my own business ☐
  - Learn a trade on the job  
(eg. carpenter, hairdresser) ☐
  - Go to college (eg. Sheridan, Mohawk) ☐
  - Go to University (eg. McMaster,  
Western). ☐

7. During the school year, I work \_\_\_\_\_ hours on average per week in a part-time job.

No hours (no part-time job)	<input type="checkbox"/>
Up to 10 hours	<input type="checkbox"/>
11 - 15 hours	<input type="checkbox"/>
16 - 20 hours	<input type="checkbox"/>
More than 20 hours	<input type="checkbox"/>

8. During the school year, I am involved each week in an organized activity after school hours to the following extent, eg. Teen Tour Band, gymnastics club, hockey team, etc.

Not at all	<input type="checkbox"/>
Up to 5 hours	<input type="checkbox"/>
6 - 10 hours	<input type="checkbox"/>
11 - 15 hours	<input type="checkbox"/>
More than 15 hours	<input type="checkbox"/>

### **INSTRUCTIONS:**

Please complete this survey based on what you know about **this** school and your attitudes when you are at school. **This is not a test.** There are no right answers, and you will not be asked to write in your name. It is your opinion that is important. There will be a space at the end for you to make comments if you wish.

The statements in the survey are grouped under different headings. For each statement, please make two evaluations by circling one response on each of the following scales.

- A. First, on the left of the statement, circle the extent to which you agree that the statement describes what is happening in your school at this time.

1	=	Strongly agree
2	=	Agree
3	=	Uncertain
4	=	Disagree
5	=	Strongly disagree



- B. Second, on the **right** of the statement, **circle how important you feel that this characterisitic is in creating a more effective school.**

- 1 = Very important  
 2 = Important  
 3 = Fairly important  
 4 = Not very important  
 5 = Not at all important

**For Example:**

If you agree that students' work is displayed around the school and you feel that it is extremely important that it should be displayed, your response would be as follows:

**DESCRIBES THIS SCHOOL**

S T R O N G L Y	A G R E E	U N C E R T A I N	D I S A G R E E	S T R O N G L Y
				D I S A G R E E
A G R E E				

A

1 2 3 4 5

Students' work is displayed around the school.

**IMPORTANCE**

V E R Y	I M P O R T A N T	F A I R L Y	N O T	N O T
		I M P O R T A N T	V E R Y	A T
			I M P O R T A N T	A L L
				I M P O R T A N T

B

1 2 3 4 5

**DESCRIBES THIS SCHOOL**

STRONGLY  
AGREE

AGREE

UNCERTAIN

DISAGREE

STRONGLY  
DISAGREE

**IMPORTANCE**

VERY  
IMPORTANT

IMPORTANT

FAIRLY  
IMPORTANT

NOT  
VERY  
IMPORTANT

NOT  
AT  
ALL  
IMPORTANT

**A**

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

**EMPHASIS ON LEARNING**

9. The most important purpose of this school is teaching and learning.

10. Teachers in this school believe that I can learn and be successful.

**HIGH EXPECTATIONS**

11. Teachers expect me to do my best.

12. Teachers tell me what they expect of me.

13. I am treated in ways which emphasize my successes, not my failures.

**COURSES**

14. Teachers use a wide variety of teaching methods and resources.

15. Important skills are retaught in different grades and courses. (e.g. problem-solving, study skills, etc.)

**B**

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

**DESCRIBES THIS SCHOOL**

STRONGLY  
AGREE

AGREE

UNCERTAIN

DISAGREE

STRONGLY  
DISAGREE

**IMPORTANCE**

VERY  
IMPORTANT

IMPORTANT

FAIRLY  
IMPORTANT

NOT  
VERY  
IMPORTANT

NOT  
AT  
ALL  
IMPORTANT

**A****B**

1 2 3 4 5

16. My courses are helping to prepare me well for success after I leave school.

1 2 3 4 5

1 2 3 4 5

17. I always understand the course material in my classes.

1 2 3 4 5

1 2 3 4 5

18. I can get extra help with my work if I need it.

1 2 3 4 5

<b>EVALUATION OF STUDENT PROGRESS</b>
---

1 2 3 4 5

19. Teachers tell me how I will be evaluated.

1 2 3 4 5

1 2 3 4 5

20. My progress is checked regularly.

1 2 3 4 5

1 2 3 4 5

21. Written and oral reports about my progress are given regularly.

1 2 3 4 5

<b>STUDENT INVOLVEMENT</b>
----------------------------

1 2 3 4 5

22. At school, I am encouraged to think for myself.

1 2 3 4 5

1 2 3 4 5

23. I am given opportunities to take on extra jobs and responsibilities in this school.

1 2 3 4 5

1 2 3 4 5

24. Generally, I feel valuable and capable at school.

1 2 3 4 5

**DESCRIBES THIS SCHOOL**

S  
T  
R  
O  
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Y  
  
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G  
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R  
E  
E

**IMPORTANCE**

V  
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I  
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A  
L  
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I  
M  
P  
O  
R  
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A  
N  
T

**A**

1 2 3 4 5

25. I have a say in school decisions that affect me.

1 2 3 4 5

26. There is a well organized co-curricular (extra-curricular) activities program in the school. e.g. volleyball team, drama club, etc.

**B**

1 2 3 4 5

1 2 3 4 5

**TEACHERS AND STUDENTS**

1 2 3 4 5

27. Teachers are available to discuss matters relating to courses.

1 2 3 4 5

28. Teachers are usually willing to spend extra time to discuss my personal and/or academic concerns.

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

29. Teachers treat me fairly.

1 2 3 4 5

1 2 3 4 5

30. Teachers treat me with understanding, caring and concern.

1 2 3 4 5

1 2 3 4 5

31. Staff and students work together to solve problems.

1 2 3 4 5

1 2 3 4 5

32. I get along well with most of my teachers.

1 2 3 4 5

**DESCRIBES THIS SCHOOL**

S T R O N G L Y  
 A G R E E  
 U N C E R T A I N  
 D I S A G R E E  
 S T R O N G L Y  
 D I S A G R E E

**IMPORTANCE**

V E R Y  
 I M P O R T A N T  
 I M P O R T A N T  
 F A I R L Y  
 I M P O R T A N T  
 N O T  
 V E R Y  
 I M P O R T A N T  
 N O T  
 A T  
 A L L  
 I M P O R T A N T

**A****SCHOOL ATMOSPHERE****B**

1 2 3 4 5

33. The atmosphere in this school encourages learning.

1 2 3 4 5

1 2 3 4 5

34. I feel proud of this school.

1 2 3 4 5

1 2 3 4 5

35. I enjoy school most of the time.

1 2 3 4 5

**PRAISE AND RECOGNITION**

1 2 3 4 5

36. There are many opportunities for reward and recognition for students throughout the school.

1 2 3 4 5

1 2 3 4 5

37. Teachers praise students for all kinds of achievements, not just the best marks.

1 2 3 4 5

1 2 3 4 5

38. Teachers make me feel good about myself.

1 2 3 4 5

**BEHAVIOUR**

1 2 3 4 5

39. My school has clear, consistent rules and expectations.

1 2 3 4 5

1 2 3 4 5

40. When rules are broken, the school takes action.

1 2 3 4 5

# DESCRIBES THIS SCHOOL

STRONGLY  
AGREE  
UNCERTAIN  
DISAGREE  
STRONGLY  
DISAGREE

# 154 IMPORTANCE

VERY  
IMPORTANT  
FAIRLY  
IMPORTANT  
NOT  
VERY  
IMPORTANT  
NOT  
AT  
ALL  
IMPORTANT

A

## PARENTS AND THE COMMUNITY

B

1 2 3 4 5

41. Teachers in this school get along with parents.

1 2 3 4 5

## THE SCHOOL BUILDING

1 2 3 4 5

42. This school is attractive, clean and well-kept.

1 2 3 4 5

1 2 3 4 5

43. Students' work is displayed around the school.

1 2 3 4 5

## TEACHERS AT WORK

1 2 3 4 5

44. My teachers try new ways to improve courses and teaching methods.

1 2 3 4 5

## PRINCIPAL AND VICE PRINCIPAL(S)

1 2 3 4 5

45. The principal and vice principal(s) have high expectations of students.

1 2 3 4 5

1 2 3 4 5

46. The principal and vice principal(s) communicate openly and honestly with students.

1 2 3 4 5

**IMPORTANCE**

NOT AT ALL IMPORTANT  
NOT VERY IMPORTANT  
FAIRLY IMPORTANT  
IMPORTANT  
VERY IMPORTANT

**DESCRIBES THIS SCHOOL**

STRONGLY DISAGREE  
DISAGREE  
UNCERTAIN  
AGREE  
STRONGLY AGREE

**A**

1 2 3 4 5

47. The principal and vice-principal(s) can be seen around the school most days.

1 2 3 4 5

48. I can speak to the principal or vice principal(s) when I have an important concern.

**B**

1 2 3 4 5

1 2 3 4 5

**SCHOOL PURPOSE**

1 2 3 4 5

49. This school has a clear idea of what is important.

1 2 3 4 5

1 2 3 4 5

50. The staff works to improve the school.

1 2 3 4 5

**WORKING TOGETHER**

1 2 3 4 5

51. People in this school work together as a team.

1 2 3 4 5

1 2 3 4 5

52. New students and parents are made to feel welcome in this school.

1 2 3 4 5

**SCHOOL GOALS**

1 2 3 4 5

53. The school has a set of clearly stated goals.

1 2 3 4 5

1 2 3 4 5

54. I consider the school goals important.

1 2 3 4 5

55. Students have input into the school's planning process.

State what you believe to be one school goal:

---



---



---



---

# DESCRIBES MY ATTITUDE

STRONGLY  
AGREE

UNCERTAIN

DISAGREE

STRONGLY  
DISAGREE

# IMPORTANCE

VERY  
IMPORTANT

FAIRLY  
IMPORTANT

NOT  
VERY  
IMPORTANT

NOT  
AT  
ALL  
IMPORTANT

A

## STUDENT ATTITUDES

B

1 2 3 4 5

56. I hand in my assignments on time.

1 2 3 4 5

1 2 3 4 5

57. I am on time for my classes.

1 2 3 4 5

1 2 3 4 5

58. I am not absent unless on a field trip, sports event or ill.

1 2 3 4 5

1 2 3 4 5

59. I have confidence in myself at school.

1 2 3 4 5

1 2 3 4 5

60. I do the best I can at school.

1 2 3 4 5

1 2 3 4 5

61. I am enthusiastic about learning.

1 2 3 4 5



**Please add any further comments you have with regard to this school.**

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

**THANK YOU FOR TAKING THE TIME TO FILL OUT THIS QUESTIONNAIRE!!!**

--	--	--	--

## MEASURE OF CHARACTERISTICS PRESENT IN THE FORMULATION AND IMPLEMENTATION OF VISIONING STRATEGY

### A. Identification (Please see 'Anonymity' note on page 6.)

Your position \_\_\_\_\_

Grade levels included in your school \_\_\_\_\_

Number of students attending your school \_\_\_\_\_

Type of School Board - Public \_\_\_\_\_  
   Catholic \_\_\_\_\_  
   Private \_\_\_\_\_

1. In the past two years have you been involved in the formulation or implementation of a Vision for your school that included a specifically defined sequential criteria for achieving desired school outcomes, including consideration of the past, present, and what the organization aspires to in the future? **If no, still have student survey completed, and return both.**

☐ YES

☐ NO

### B. Formulation of Vision

2. To what degree were each of the following groups of stakeholders involved in formulating the Vision?

		Not at all involved			Involved 4 or more times	
a)	Parents					
	i) attending committee meetings	1	2	3	4	5
	ii) attending public forums	1	2	3	4	5
	iii) completing questionnaires	1	2	3	4	5
	iv) other _____	1	2	3	4	5

		Not at all involved			Involved 4 or more times	
a)	<b>Students</b>					
	i) attending committee meetings	1	2	3	4	5
	ii) attending public forums	1	2	3	4	5
	iii) completing questionnaires	1	2	3	4	5
	iv) other _____	1	2	3	4	5
a)	<b>Teachers</b>					
	i) attending committee meetings	1	2	3	4	5
	ii) attending public forums	1	2	3	4	5
	iii) completing questionnaires	1	2	3	4	5
	iv) other _____	1	2	3	4	5
a)	<b>Department heads</b>					
	i) attending committee meetings	1	2	3	4	5
	ii) attending public forums	1	2	3	4	5
	iii) completing questionnaires	1	2	3	4	5
	iv) other _____	1	2	3	4	5
a)	<b>In-school consultants/specialists</b>					
	i) attending committee meetings	1	2	3	4	5
	ii) attending public forums	1	2	3	4	5
	iii) completing questionnaires	1	2	3	4	5
	iv) other _____	1	2	3	4	5
a)	<b>Vice-principals</b>					
	i) attending committee meetings	1	2	3	4	5
	ii) attending public forums	1	2	3	4	5
	iii) completing questionnaires	1	2	3	4	5
	iv) other _____	1	2	3	4	5
a)	<b>Principals</b>					
	i) attending committee meetings	1	2	3	4	5
	ii) attending public forums	1	2	3	4	5
	iii) completing questionnaires	1	2	3	4	5
	iv) other _____	1	2	3	4	5
a)	<b>Board level consultants/specialists</b>					
	i) attending committee meetings	1	2	3	4	5
	ii) attending public forums	1	2	3	4	5
	iii) completing questionnaires	1	2	3	4	5
	iv) other _____	1	2	3	4	5
a)	<b>Assistant superintendents</b>					
	i) attending committee meetings	1	2	3	4	5
	ii) attending public forums	1	2	3	4	5
	iii) completing questionnaires	1	2	3	4	5
	iv) other _____	1	2	3	4	5

j)	Superintendents						
	i)	attending committee meetings	1	2	3	4	5
	ii)	attending public forums	1	2	3	4	5
	iii)	completing questionnaires	1	2	3	4	5
	iv)	other _____	1	2	3	4	5
k)	Other _____						
	i)	attending committee meetings	1	2	3	4	5
	ii)	attending public forums	1	2	3	4	5
	iii)	completing questionnaires	1	2	3	4	5
	iv)	other _____	1	2	3	4	5

3. To what degree did the process of creating a Vision statement include discussion of the following?

	No discussion				Much discussion
a) What the school has been in the past	1	2	3	4	5
b) Where the school is now	1	2	3	4	5
c) What we want the school to become	1	2	3	4	5
d) Identification of strengths and weaknesses associated with achieving what we want the school to become	1	2	3	4	5

### C. Implementation of Vision

4. Does the implementation of the Vision include use of a strategic plan? ☐ Yes ☐ No
5. How significant are the following characteristics in the strategic plan for the implementation of Vision at your school?

	Not significant			Very significant	
	1	2	3	4	5
a) Specific action steps	1	2	3	4	5
b) Statement of who is responsible for carrying out each action step	1	2	3	4	5
c) Time line stating when specific steps are to be enacted	1	2	3	4	5
d) Formal provision for assessment of adherence to implementation procedures	1	2	3	4	5

### D. Feedback / Assessment

6. To the best of your knowledge, what percentage of the action steps or implementation procedures required to be completed to date have actually been completed on time?

☐ 10%  
☐ 20%  
☐ 30%  
☐ 40%

☐ 50%  
☐ 60%  
☐ 70%

☐ 80%  
☐ 90%  
☐ 100%

7. From which groups has feedback been received concerning the implementation of strategy or achievement of goals specified in the Visioning Strategy?

- a) Parents
- |                               |  |
|-------------------------------|--|
| i) written report(s)          | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| ii) oral report(s)            | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| iii) assessment instrument(s) | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| iv) other _____               | <input type="checkbox"/> Yes <input type="checkbox"/> No |

- a) **Students**
- i) written report(s) ☐ Yes ☐ No
  - ii) oral report(s) ☐ Yes ☐ No
  - iii) assessment instrument(s) ☐ Yes ☐ No
  - iv) other \_\_\_\_\_ ☐ Yes ☐ No
- a) **Teachers**
- i) written report(s) ☐ Yes ☐ No
  - ii) oral report(s) ☐ Yes ☐ No
  - iii) assessment instrument(s) ☐ Yes ☐ No
  - iv) other \_\_\_\_\_ ☐ Yes ☐ No
- a) **Department heads**
- i) written report(s) ☐ Yes ☐ No
  - ii) oral report(s) ☐ Yes ☐ No
  - iii) assessment instrument(s) ☐ Yes ☐ No
  - iv) other \_\_\_\_\_ ☐ Yes ☐ No
- a) **In-school consultants/specialists**
- i) written report(s) ☐ Yes ☐ No
  - ii) oral report(s) ☐ Yes ☐ No
  - iii) assessment instrument(s) ☐ Yes ☐ No
  - iv) other \_\_\_\_\_ ☐ Yes ☐ No
- a) **Vice-principals**
- i) written report(s) ☐ Yes ☐ No
  - ii) oral report(s) ☐ Yes ☐ No
  - iii) assessment instrument(s) ☐ Yes ☐ No
  - iv) other \_\_\_\_\_ ☐ Yes ☐ No
- a) **Principals**
- i) written report(s) ☐ Yes ☐ No
  - ii) oral report(s) ☐ Yes ☐ No
  - iii) assessment instrument(s) ☐ Yes ☐ No
  - iv) other \_\_\_\_\_ ☐ Yes ☐ No
- a) **Board level consultants/specialists**
- i) written report(s) ☐ Yes ☐ No
  - ii) oral report(s) ☐ Yes ☐ No
  - iii) assessment instrument(s) ☐ Yes ☐ No
  - iv) other \_\_\_\_\_ ☐ Yes ☐ No

- a) Assistant superintendents
- i) written report(s) ☐ Yes ☐ No
- ii) oral report(s) ☐ Yes ☐ No
- iii) assessment instrument(s) ☐ Yes ☐ No
- iv) other \_\_\_\_\_ ☐ Yes ☐ No
- 
- a) Superintendents
- i) written report(s) ☐ Yes ☐ No
- ii) oral report(s) ☐ Yes ☐ No
- iii) assessment instrument(s) ☐ Yes ☐ No
- iv) other \_\_\_\_\_ ☐ Yes ☐ No
- 
- a) Other \_\_\_\_\_
- i) written report(s) ☐ Yes ☐ No
- ii) oral report(s) ☐ Yes ☐ No
- iii) assessment instrument(s) ☐ Yes ☐ No
- iv) other \_\_\_\_\_ ☐ Yes ☐ No

Thank you for completing this questionnaire. Please read the following.

- Anonymity

All returned questionnaires will be assigned a code number in order that they may be correlated with the 'effectiveness questionnaire' and so that identification of the actual respondents will be held in anonymity. Only the primary researcher will have access to the code key, which will be held in a secure place and destroyed upon completion of the statistical analysis.

- Returning the questionnaire

Please place this questionnaire in the envelope provided, and when the effectiveness questionnaire has been received from the administering teacher and also placed in this envelope, please return. If you would like to be informed of the results and implications of this study, please so indicate below.

I would like to receive a copy of the results of this study ☐ Yes ☐ No

**A SCHOOL FOR THE EIGHTIES AND NINETIES: A PRIORITIES SEARCH**

- Eugene R. Howard, Colorado Department of Education

**Directions:** For each item listed below, please indicate the extent to which you agree that this item describes our school.

- 0 – Disagree (not a characteristic of our school)
- 1 – Agree with reservations
- 2 – Agree
- 3 – Agree strongly

**I. The Learning Community**

- \_\_\_\_\_ 1. Community-based Learning –  
Education in the school and community is organized in such a way that pupils learn in many places and not just in school, and learn from people who are not professional teachers as well as those who are.
- \_\_\_\_\_ 2. School As Learning Community –  
The school is a community resource; a learning center which is the focus of a learning community in which staff, students, parents and other community members are involved in life-long learning both individually and through mutual activities.
- \_\_\_\_\_ 3. Life-long Learning –  
The school as a learning center supports life-long learning by providing educational services to any person regardless of his or her age, from preschool to senior citizens.
- \_\_\_\_\_ 4. Personal Responsibility –  
All students are expected to assume increasing responsibility for their actions and future, and for service to the school and community.
- \_\_\_\_\_ 5. Social and Political Responsibility –  
Through its programs and activities, the school prepares all community members for participation in the social and political life of the community and provides the opportunity to exercise their rights and responsibilities as school and community citizens.
- \_\_\_\_\_ 6. Significant Dialogue –  
Provision is made for ongoing dialogue among staff, teachers, parents, and other community leaders concerning the purpose of schooling and the nature of the learning process.
- \_\_\_\_\_ 7. Planned Change –  
Community leaders, staff, parents and students are involved in planning and implementing change for school improvement.
- \_\_\_\_\_ 8. Supportive Climate –  
Educational leaders develop a supportive climate in which students, staff, and others can experiment, fail, succeed, take risks, and expand their own creativity.



## **II. The Learning Process**

- \_\_\_ 9. **Personalized Education Plan –**  
Each student, his or her parents, and appropriate staff are involved in developing for the student a personalized education plan that provides a wide variety of learning experiences.
- \_\_\_ 10. **Individualized Performance Expectations –**  
Every student is not expected to learn the same thing in the same way, in the same length of time, or necessarily in the same place.
- \_\_\_ 11. **Outcome-based Education –**  
Instruction is targeted on each student's current learning level rather than the student's ability level or grade level. Each student's rate of progress is determined by the speed with which he or she can reach specific learning goals. Credit is awarded whenever mastery occurs.
- \_\_\_ 12. **Access to Learning Opportunities –**  
In the school, access to significant learning activities is not limited due to sex, race or wealth and there is an emphasis on improving the quality of learning for all individuals within integrated learning groups.
- \_\_\_ 13. **Cooperation –**  
The learning process emphasizes cooperation through group interaction and balances cooperation with constructive competition throughout the school and all its activities.
- \_\_\_ 14. **Mastery of the Learning Process –**  
The common target of all the areas of the instructional program is the progressive mastery of the learning process by all students throughout elementary and secondary schooling.
- \_\_\_ 15. **Self-directed Learning –**  
Mastery of the learning process includes, but is not limited to, the demonstrated ability to seek, analyse and apply information to the learning task and to use higher order thought processes to assume self-direction in learning.
- \_\_\_ 16. **Intellectual Skills –**  
Mastery of the learning process also includes, but is not limited to, demonstration of intellectual skills in creativity, analytical thinking and problem solution.
- \_\_\_ 17. **Adaptability-survival Skills –**  
Mastery also includes, but is not limited to, demonstration of adaptability and survival skills that give the student the ability to accommodate rapid change.
- \_\_\_ 18. **Teacher as Facilitator-coordinator –**  
Teachers serve as facilitators of learning, coordinators of community and in-school learning resources, and derive renewal and rewards from their role as service providers.

### **III. The Learning Program**

- \_\_\_ 19. Literacy, Math and Science –  
The instructional program includes specific instruction and demonstrated learning in reading, writing, mathematics and science throughout each year of elementary and secondary schooling.
- \_\_\_ 20. Instructional Coordination –  
The instructional program builds upon previous instruction and involves explicit instructional coordination among reading, writing, mathematics and science throughout each year of elementary and secondary schooling.
- \_\_\_ 21. Global Education –  
The instructional program includes specific instruction and demonstrated learning that emphasizes interdependence in a global and international context, especially in regard to economic and ecological concepts, throughout each year of elementary and secondary schooling.
- \_\_\_ 22. Second Language –  
The instructional program includes specific instruction and demonstrated learning in reading, writing and conversing in a second language for all students throughout each year of elementary and secondary schooling.
- \_\_\_ 23. Technology –  
The instructional program includes specific instruction in and about technology and its effects upon society, including computer technology, throughout each year of elementary and secondary schooling.
- \_\_\_ 24. Fine Arts and Humanities –  
The instructional program includes specific learning experiences in the fine arts and humanities that are designed to encourage the growth of aesthetic capacity, that is, the ability to create and appreciate beauty.
- \_\_\_ 25. Self-understanding and Skills for Living –  
The instructional program includes specific learning experiences designed to improve self-knowledge, self-esteem, and living skills, particularly in physical and emotional health and social interaction, so that students become proactive, rather than reactive, to their physiological and psychological selves.
- \_\_\_ 26. Interdisciplinary Learning –  
A significant portion of learning is interdisciplinary; learners are taught that knowledge from several disciplines can be interrelated and used for concept building, problem solving and information-based opinion formation.
- \_\_\_ 27. Varied Learning Environments –  
The instructional program includes a wide variety of settings to accommodate different learning needs of students. Certain of these settings are places other than the school.

Dr. L. Morton  
Chair of the Ethics Committee  
Faculty of Education, University of Windsor  
Windsor, Ontario  
N9P 3P4

Letter to the Ethics Committee

Dear Dr. Morton:

As a graduate student at the University of Windsor currently pursuing my Master of Education degree in Educational Administration, I am requesting permission from the Faculty of Education Ethics Committee to conduct a research study on the relationships that may exist between visioning strategy and effectiveness in schools. The procedure to be followed will involve collection of data from Southwestern Ontario secondary school principals. These principals will be employed by one of the 12 boards who give their permission for this study to occur in their schools, as well as by private secondary schools within this region. Data will also be collected from one class of OAC students in each school.

Two data collection instruments will be used. The first is 'Measure of Characteristics Present in the Formulation and Implementation of Visioning Strategy' (MCP-FIV), constructed by the researcher, and based on the work of Dlugosh, Norton, and Sybouts, 1996; Kirkpatrick, Lodge, and Latham, 1996; Stoll and Fink, 1996; Sheetz and Benson, 1994; and Thompson, 1992. The second is 'A School for the Eighties and Nineties', (Howard, 1986).

A formal research proposal is enclosed which includes both questionnaires that will be administered to the subjects. Participation will be voluntary and subjects will be free to withdraw at any point. All data will be treated confidentially, and although the identity of the responding principals will be known to the researcher, a numbering system will serve as a screen to preserve anonymity within the study and data analysis. There are no known risks associated with participating in this study, and its results will be available on request.

If you have any questions or concerns about the proposed research, please contact me at 250-6980, by e-mail at [glennrideout@hotmail.com](mailto:glennrideout@hotmail.com), or my advisor Prof. Linda McKay, Ph. D., at 253-3000, ext. 3800. Thank you for your consideration of this request; I look forward to your response.

Yours Sincerely,



Glenn Rideout

Sept. 25, 2000

Pre-Approach Letter to Principals

Dear Principal,

Your board has given me permission to ask you to participate in school effectiveness research that I am conducting for my M. Ed. thesis. I'm sending this note ahead of time **to ask if you would please take time (when it arrives) to complete the 15 minute questionnaire, and pass the student questionnaire (15-20 minutes) along to one OAC teacher to give to one OAC class. That's it!**

I'm a little afraid that the envelope that you'll receive in a few days may look intimidating. The actual input on your part is as stated above, and **I would really appreciate it if you could fit this into what I am aware is a busy schedule.** I don't know of any other way to get the feedback that I need. The results of the study may actually be relevant to your school, and a copy is available upon its completion.

I hope that you can see your way clear to help in this matter..

Thanks,

Glenn Rideout  
(519) 250-6980, glennrideout@hotmail.com  
University of Windsor

## Letter to Principals

Sept. 25, 2000

Mr. XXXXXXXX, Principal  
XXXXXXX High School  
1400 XXXXXXXXXX  
Windsor, ON

Dear Mr. XXXXXXXX

As a graduate student in the Faculty of Education at the University of Windsor, I am conducting the following research as part of my thesis. My interest is in the possible correlation between the presence of a visioning strategy and effectiveness in a school as judged by graduating students.

Your Board has given me permission to ask if you would participate in this study. Your participation is voluntary, and would involve two simple steps, which are detailed in the "procedures" section below.

Confidentiality will be maintained and anonymity will be assured through the use of a numbering system so that responses will be correlated by groupings of number, rather than school name. The master list will be secured by me personally, and will be destroyed at the completion of this study. Withdrawal from the study is possible at any time, and I am available to answer your questions at (519) 250-6980, or you may reach me at glennrideout@hotmail.com. Concerns of an ethical nature may be directed to the chair of the Ethics Committee, Dr. L. Morton, (519) 253-4232, ext. 3800. Dr. L. McKay, my thesis advisor, can be reached at (519) 253-3800, ext. 3819.

Procedure:

1. Please personally complete the questionnaire entitled "Measure of Characteristics Present in the Formulation and Implementation of Visioning Strategy". (15 min. +/-)
2. Select an OAC teacher with a class of at least 15 students, and give that teacher the questionnaire "A School for the Eighties and Nineties", along with the accompanying "Administering..." sheet, which is self explanatory. (Student time - 15-20 min.)

When the questionnaires are returned to you, simply place them in the self-addressed envelope with your questionnaire and put in the outbound mail.

Yours Sincerely,

Glenn Rideout

## Letter to Teachers

Dear Teacher:

As a graduate student in the Faculty of Education at the University of Windsor, I am conducting the following research as part of my thesis. My interest is in the possible correlation between the presence of a visioning strategy and effectiveness in a school as judged by graduating students.

Your Board has given me permission to ask your school to participate in this study. Your participation, which is voluntary, simply involves following the instructions on the attached "Administering..." sheet.

Confidentiality will be maintained and anonymity will be assured through the use of a numbering system so that responses will be correlated by groupings of number, rather than school name. The master list will be secured by me personally, and will be destroyed at the completion of this study. Withdrawal from the study is possible at any time, and I am available to answer your questions at (519) 250-6980, or you may reach me at [glennrideout@hotmail.com](mailto:glennrideout@hotmail.com). Concerns of an ethical nature may be directed to the chair of the Ethics Committee, Dr. L. Morton, (519) 253-4232, ext. 3800. Dr. L. McKay, my thesis advisor, can be reached at (519) 253-3800, ext. 3819.

Thank-you for your assistance in this matter.

Yours Sincerely,

Glenn Rideout

**Administering “A SCHOOL FOR THE EIGHTIES AND NINETIES:  
A PRIORITY SEARCH”**

Instructions to teacher:

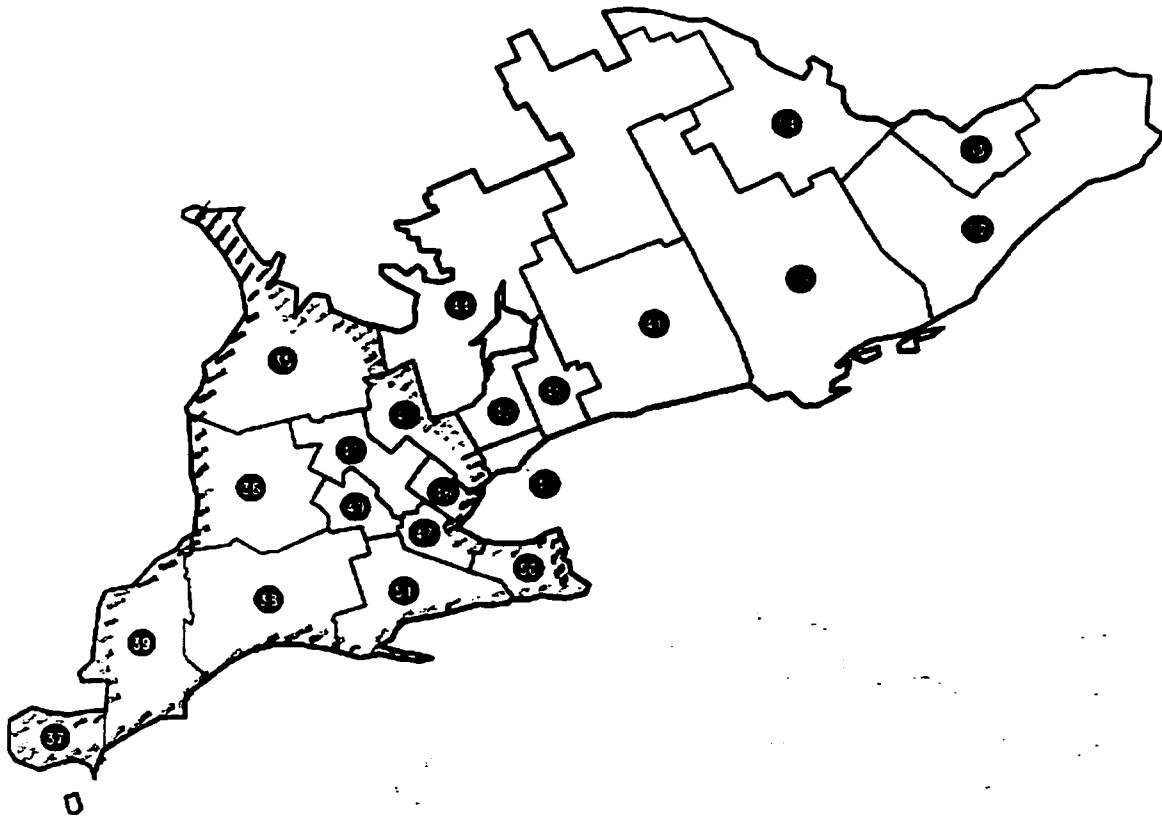
1. Please ensure that the questionnaire is given to an OAC class of at least 15 students.
2. Please ensure that all (and only) students in the class who have spent at least one full year in this school receive a copy of the questionnaire. Please make as many photocopies as required for your class.
3. Students are not to identify themselves or the school on the questionnaire.
4. Most students should be finished within fifteen minutes, but it is important that all students finish all questions.
5. Please do not attempt to explain any particular question to students. Let them draw whatever meaning they can from the text.
6. There is to be no discussion during completion; this is to be completed individually.
7. Please return the completed questionnaires to your principal immediately upon their completion.

Thanks for taking time from your busy day to assist in this research. Please feel welcome to contact me at 519-250-6980, or [glennrideout@hotmail.com](mailto:glennrideout@hotmail.com) .

Thanks again.

Glenn Rideout

Area of Southern Ontario Covered by Study





## Chronbach's Alpha Reliability Test for 'Effectiveness' Instrument

## R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   ( A L P H A )

		Mean	Std Dev	Cases
1.	V1	1.5008	.8644	637.0
2.	V2	1.6138	.7980	637.0
3.	V3	1.1146	1.0192	637.0
4.	V4	2.2543	.7677	637.0
5.	V5	1.4458	.8480	637.0
6.	V6	1.6279	.7532	637.0
7.	V7	1.6546	.9599	637.0
8.	V8	1.7237	.8536	637.0
9.	V9	1.3909	.9297	637.0
10.	V10	1.4396	1.0240	637.0
11.	V11	1.2119	.9370	637.0
12.	V12	2.2575	.8539	637.0
13.	V13	1.9356	.7380	637.0
14.	V14	1.8556	.7489	637.0
15.	V15	1.8964	.7536	637.0
16.	V16	2.0094	.8448	637.0
17.	V17	1.4819	.8384	637.0
18.	V18	1.7237	.7984	637.0
19.	V19	2.0502	.8359	637.0
20.	V20	1.9325	.7751	637.0
21.	V21	1.4239	.8005	637.0
22.	V22	1.4914	.9394	637.0
23.	V23	1.5856	.8942	637.0
24.	V24	1.6593	.8588	637.0
25.	V25	1.6075	.8279	637.0
26.	V26	1.6719	.7895	637.0
27.	V27	1.4521	.9281	637.0

Statistics for	Mean	Variance	Std Dev	N of Variables
SCALE	45.0126	114.8709	10.7178	27

## Reliability Coefficients

N of Cases = 637.0

N of Items = 27

Alpha = .8601

## Relative Frequency Table for School Effectiveness Score

## Frequencies

## Statistics

School Effectiveness

N	Valid	33
	Missing	0

## School Effectiveness

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 30.83	1	3.0	3.0	3.0
39.53	1	3.0	3.0	6.1
40.25	1	3.0	3.0	9.1
40.44	1	3.0	3.0	12.1
40.60	1	3.0	3.0	15.2
40.89	1	3.0	3.0	18.2
41.14	1	3.0	3.0	21.2
42.00	1	3.0	3.0	24.2
42.03	1	3.0	3.0	27.3
42.60	1	3.0	3.0	30.3
42.77	1	3.0	3.0	33.3
43.88	1	3.0	3.0	36.4
44.68	1	3.0	3.0	39.4
45.91	2	6.1	6.1	45.5
45.91	1	3.0	3.0	48.5
46.00	1	3.0	3.0	51.5
46.54	1	3.0	3.0	54.5
46.60	1	3.0	3.0	57.6
46.80	1	3.0	3.0	60.6
47.11	1	3.0	3.0	63.6
47.17	1	3.0	3.0	66.7
47.44	1	3.0	3.0	69.7
47.75	1	3.0	3.0	72.7
47.82	1	3.0	3.0	75.8
48.19	1	3.0	3.0	78.8
48.87	1	3.0	3.0	81.8
49.80	1	3.0	3.0	84.8
50.54	1	3.0	3.0	87.9
50.78	1	3.0	3.0	90.9
51.21	1	3.0	3.0	93.9
52.38	1	3.0	3.0	97.0
62.60	1	3.0	3.0	100.0
Total	33	100.0	100.0	

T-Test for Difference between VS=0 and VS≠0, P>2

## T-Test

### Group Statistics

VS wrt principal duration		N	Mean	Std. Deviation	Std. Error Mean
School Effectiveness	School has VS	17	46.1192	6.7033	1.6258
	no VS but more than 2years	10	44.7101	3.0642	.9690

### Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
School Effectiveness	Equal variances assumed	1.734	.200	.624	25	.538	1.409	2.259	-3.24	6.06
	Equal variances not assumed			.745	24.0	.464	1.409	1.893	-2.50	5.32

## Relative Frequency Table for Visioning Strategy Score

## Frequencies

## Statistics

Visioning Strategy

N	Valid	33
	Missing	0

## Visioning Strategy

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid -4.00	1	3.0	3.0	3.0
.00	16	48.5	48.5	51.5
36.00	1	3.0	3.0	54.5
60.00	1	3.0	3.0	57.6
103.48	1	3.0	3.0	60.6
107.00	1	3.0	3.0	63.6
124.00	1	3.0	3.0	66.7
133.00	2	6.1	6.1	72.7
139.00	1	3.0	3.0	75.8
141.00	1	3.0	3.0	78.8
147.00	1	3.0	3.0	81.8
148.00	1	3.0	3.0	84.8
155.00	1	3.0	3.0	87.9
178.00	1	3.0	3.0	90.9
191.00	1	3.0	3.0	93.9
217.00	1	3.0	3.0	97.0
218.00	1	3.0	3.0	100.0
Total	33	100.0	100.0	

## Pearson Correlation Coefficient Test

## Correlations

## Descriptive Statistics

	Mean	Std. Deviation	N
Visioning Strategy	67.4691	78.4862	33
School Effectiveness	45.6660	5.2976	33

## Correlations

		Visioning Strategy	School Effectiveness
Visioning Strategy	Pearson Correlation	1.000	.047
	Sig. (2-tailed)	.	.795
	N	33	33
School Effectiveness	Pearson Correlation	.047	1.000
	Sig. (2-tailed)	.795	.
	N	33	33

## Oneway ANOVA for School Effectiveness Based on Board Type

## Oneway

## Descriptives

School Effectiveness

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
catholic	13	44.3825	2.8045	.7778	42.6878	46.0772
private	9	49.8590	5.7351	1.9117	45.4506	54.2674
public	11	43.7523	5.6623	1.7072	39.9484	47.5563
Total	33	45.6660	5.2976	.9222	43.7876	47.5445

## Descriptives

School Effectiveness

	Minimum	Maximum
catholic	39.53	48.87
private	42.00	62.60
public	30.83	50.78
Total	30.83	62.60

## ANOVA

School Effectiveness

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	219.930	2	109.965	4.865	.015
Within Groups	678.128	30	22.604		
Total	898.058	32			

## Post Hoc Tests

## Multiple Comparisons

180

Dependent Variable: School Effectiveness

Scheffe

(I) Board Type	(J) Board Type	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
catholic	private	-5.4765*	2.0616	.042	-10.7856	-.1673
	public	.6302	1.9477	.949	-4.3857	5.6460
private	catholic	5.4765*	2.0616	.042	.1673	10.7856
	public	6.1067*	2.1369	.027	.6036	11.6097
public	catholic	-.6302	1.9477	.949	-5.6460	4.3857
	private	-6.1067*	2.1369	.027	-11.6097	-.6036

\*. The mean difference is significant at the .05 level.

## Homogeneous Subsets

### School Effectiveness

Scheffe<sup>a,b</sup>

Board Type	N	Subset for alpha = .05	
		1	2
public	11	43.7523	49.8590
catholic	13	44.3825	
private	9		
Sig.		.954	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.755.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Oneway ANOVA for School Effectiveness Based on Board Type, Across Instrument Sections I, II, and III

Oneway

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
						Lower Bound	Upper Bound
EFFSECT1	1	13	12.7446	.8550	.2371	12.2279	13.2613
	2	9	14.5422	1.7990	.5997	13.1594	15.9251
	3	11	12.2855	1.5959	.4812	11.2133	13.3576
	Total	33	13.0818	1.6563	.2883	12.4945	13.6691
EFFSECT2	1	13	17.0142	1.2855	.3565	16.2374	17.7911
	2	9	18.7352	2.0811	.6937	17.1356	20.3349
	3	11	16.9887	2.0787	.6267	15.5922	18.3852
	Total	33	17.4751	1.9149	.3333	16.7961	18.1541
EFFSECT3	1	13	14.6232	1.3683	.3795	13.7964	15.4501
	2	9	16.5826	2.0633	.6878	14.9966	18.1685
	3	11	14.4795	2.1880	.6597	13.0096	15.9494
	Total	33	15.1097	2.0261	.3527	14.3912	15.8281



		Minimum	Maximum
EFFSECT1	1	11.42	14.23
	2	11.61	18.00
	3	8.83	15.13
	Total	8.83	18.00
EFFSECT2	1	15.22	19.60
	2	15.61	23.20
	3	12.45	19.00
	Total	12.45	23.20
EFFSECT3	1	11.47	16.67
	2	14.78	21.40
	3	9.55	16.96
	Total	9.55	21.40

## ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
EFFSECT1	Between Groups	27.649	2	13.825	6.897	.003
	Within Groups	60.134	30	2.004		
	Total	87.783	32			
EFFSECT2	Between Groups	19.655	2	9.827	3.018	.064
	Within Groups	97.688	30	3.256		
	Total	117.342	32			
EFFSECT3	Between Groups	26.970	2	13.485	3.875	.032
	Within Groups	104.395	30	3.480		
	Total	131.365	32			

## Post Hoc Tests

Scheffe

Dependent Variable	(I) BOARDTYP	(J) BOARDTYP	Mean Difference (I-J)	Std. Error	Sig.
EFFSECT1	1	2	-1.7976*	.6139	.023
		3	.4592	.5800	.733
	2	1	1.7976*	.6139	.023
		3	2.2568*	.6364	.005
	3	1	-.4592	.5800	.733
		2	-2.2568*	.6364	.005
EFFSECT2	1	2	-1.7210	.7825	.106
		3	2.553E-02	.7393	.999
	2	1	1.7210	.7825	.106
		3	1.7465	.8111	.116
	3	1	-2.5526E-02	.7393	.999
		2	-1.7465	.8111	.116
EFFSECT3	1	2	-1.9594	.8089	.069
		3	.1438	.7642	.982
	2	1	1.9594	.8089	.069
		3	2.1031	.8385	.058
	3	1	-.1438	.7642	.982
		2	-2.1031	.8385	.058

Scheffe

Dependent Variable	(I) BOARDTYP	(J) BOARDTYP	95% Confidence Interval	
			Lower Bound	Upper Bound
EFFSECT1	1	2	-3.3786	-.2166
		3	-1.0345	1.9528
	2	1	.2166	3.3786
		3	.6180	3.8955
	3	1	-1.9528	1.0345
		2	-3.8955	-.6180
EFFSECT2	1	2	-3.7361	.2941
		3	-1.8782	1.9293
	2	1	-.2941	3.7361
		3	-.3421	3.8352
	3	1	-1.9293	1.8782
		2	-3.8352	.3421
EFFSECT3	1	2	-4.0424	.1237
		3	-1.8243	2.1118
	2	1	-.1237	4.0424
		3	-5.6064E-02	4.2623
	3	1	-2.1118	1.8243
		2	-4.2623	5.606E-02

\*. The mean difference is significant at the .05 level.

## Homogeneous Subsets

### EFFSECT1

Scheffe<sup>a,b</sup>

BOARDTYP	N	Subset for alpha = .05	
		1	2
3	11	12.2855	14.5422
1	13	12.7446	
2	9		
Sig.		.756	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.755.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**EFFSECT2**

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Scheffe<sup>a,b</sup>

BOARDTYP	N	Subset for alpha = .05
		1
3	11	16.9887
1	13	17.0142
2	9	18.7352
Sig.		.097

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.755.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**EFFSECT3**Scheffe<sup>a,b</sup>

BOARDTYP	N	Subset for alpha = .05	
		1	2
3	11	14.4795	
1	13	14.6232	14.6232
2	9		16.5826
Sig.		.984	.067

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.755.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

## VIII. VITA AUCTORIS

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